GAZETTEER

CT THE

BOMBAY PRESIDENCY.

VOLUME XXII.

DHÁRWÁR.

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Bombay:

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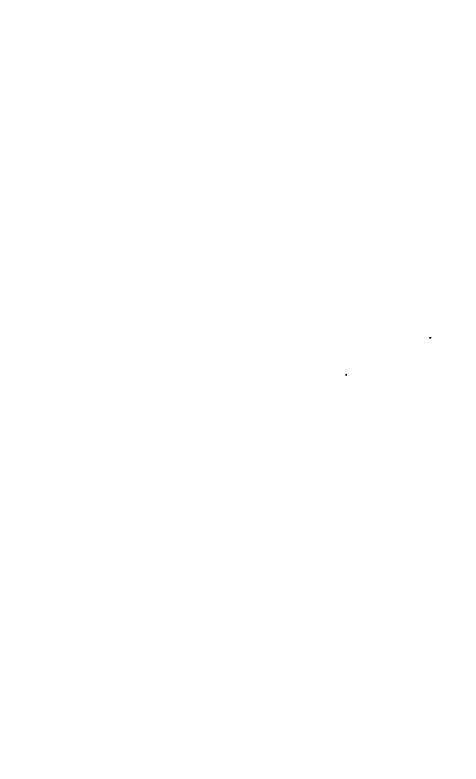
The names of contributors are given in the body of the book. Special acknowledgments are due to Ráy Bahádur Tirmalráy Venkatesh, Pensioned Small Cause Court, Judge, and to Messrs. F. L. Charles, C.S., and J. F. Muir, C.S.

Several of the more important sections have had the advantage of revision and additions by Mr. E. P. Robertson, C.S., and the Honourable J. B. Richey, C.S.I.

Mr. J. R. Middleton, C. S., Collector, aided the work by many additions and corrections.

JAMES M. CAMPBELL.

August 1884.



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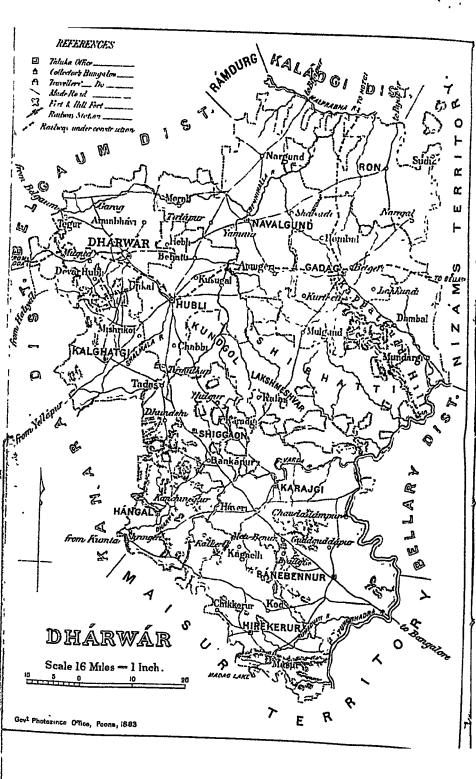
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DHÀRWÀR.



DHÁRWÁR.

CHAPTER I.

DESCRIPTION.

Dha'rwa'r,¹ between 14°17′ and 15°50′ north latitude, and 74°48′ and 76° east longitude, the southmost district of Bombay, lics on the tableland to the east of the North Kánara Sahyádris separated from the coast by a belt about fifty miles broad. It has an area of 4500 square miles, a population of 882,900 or 194.73 to the square mile, and a realizable land revenue of about £240,000 (Rs. 24,00,000).²

It forms an irregular wedge-shaped figure, about 110 miles long and varying in breadth from about seventy miles in the north to about forty miles near Kod in the south, from which, in the last twenty miles, it narrows to a point. The district is bounded on the north by Belgaum the Rámdurg state and Bádámi in south Bijápur; on the east by His Highness the Nizám's Ráichor Doáb and the Bellári district of Madras; on the south by Maisur; and on the west by North Kánara and the sub-division of Khánápur in Belgaum. An irregular broken belt of Patvardhan and Sávanur vıllages with a breadth of ten to twenty miles almost divides the east of the district into two parts, a north and a south. Besides this belt of land some scattered outlying villages lie to the west of Sávanur and there is an isolated patch of estate or jágir land at Hebli about five miles north-east of Dhárwár.

For administrative purposes the 4500 square miles of the district are distributed over eleven sub-divisions. Of these six, Dhárwár and Kalghatgi in the west, Navalgund and Hubli in the centre, and Ron and Gadag in the east, lie to the north of the Sávanur-Patvardhan villages; the seventh sub-division, Bankápur, is mixed with and lies to the west of the Sávanur villages; of the four remaining sub-divisions, Hángal is in the west, Kod in the southwest, Ránebennur in the south-east, and Karajgi in the east of the southern half of the district. The following statement shows that these sub-divisions have an average area of 410 miles 147 villages and 80,260 people:

Chapter I.
Description.

BOUNDARIES.

SUB-DIVISIONS.

From materials supplied by Mr. E. P. Robertson, C.S.
 The population and revenue details are for 1881.

DISTRICTS.

Chapter I.

Description.

Sub-Divisions.

DHARWAR ADMINISTRATIVE DETAILS, 1881-82.

							VILL	AGES					Porul	A TYON	
		Government.				Alienated.				Total.					
Sub Division.	Mrr.EB.	Villages.		Hamlets		Villages.		Hamlets.		اند	- [Land Revenue
	W	Peopled.	Unpeopled.	Poopled.	Unpeopled.	Peopled.	Unpeopled.	Peopled.	Unpeopled.	Government.	Allenated.	Total.	1881.	Square Mile.	1881-82,
Dhārwār Kalghatgi Hubii Navalgund Ron Gadag Karajgi Bankāpur Hāngal Kod Rānebennur	699 442 343 298 400 405	135 168	29 24 9 2 5 6 19 6 11 7	16 4 2	36 6 1 9 10 10 7 18 10 12	25 17 4 7 4 12 6 13 30 10 8	5 2 3 1 2 3 4 21	1 1 1 	3 (1 1 2 8	179 121 86 90 70 114 141 155 175 193 131	34 20 8 7 4 14 6 16 36 11 12	211 204 143	111,137 50,769 91,997 87,932 60,724 100,333 83,218 70,554 65,787 60,345 74,213	261 181 295 166 164 148 188 223 220 200 183	£. 27,705 12,935 20,036 38,286 10,447 25,740 19,272 19,873 18,449 18,063 15,804

ASPECT.

The line of the Poona-Harihar road, which runs north-west and south-east, divides Dhárwár into two very unlike and unequal parts, an irregular belt of hilly and woody country to the west from five to twenty-five miles broad, and to the east a bare plain stretching about sixty miles to the north-east. In the narrow western belt the soil is red and gravelly, the country hilly and woody, the air cool, the rainfall thirty to forty inches, and the water-supply in most places abundant. The villages are generally close together on rising ground with shady sites and poor but hardworking people. Many lakes or reservoirs are used both for drinking and watering, and there is a large watered area of rice-land in the north and centre, and of rice, sugarcane, and betel-palm gardens in the south. To the east of the Harihar road, in the north and centre of the district, the plain is a broad stretch of black soil, flat and bare except for a few ranges of low bushy hills, the rainfall is twenty to thirty inches, and the water-supply is scanty and in places brackish. In the east the villages are large and far apart, generally poorly shaded, and with rich and skilful husbandmen.

The West.

The Western Belt, which is five to twenty-five miles broad, is part of the rough wooded country along the Sahyádri water-shed. In the north, the district passes fifteen or twenty miles west of the line of water-shed, the town of Dhárwár fifteen miles from the frontier standing at the water-parting 2420 feet above the sea, the source of streams which flow west to the Indian Ocean and east to the Bay of Bengal. To the south the Dhárwár border passes further east, leaving the water-shed within Kánara limits. All along, in the extreme west, the country is wild with woody hills 100 to 300 feet high, rugged or smooth, flat-topped or pointed, detached or in ranges, many of them, especially those in Kalghatgi Hángal and Bankápur, giving cover to wild pig, deer, panthers, and tigers. Fifty years ago these western hills were occasionally visited by wild elephants. Throughout this western belt ranges of low bushy hills, 300 to 700

feet high, run in parallel lines north-west and south-east. Towards the east the hills gradually grow barer, less rugged, and more isolated, and are separated by broad rich valleys whose tillage spreads up the lower slopes. In the south these lines of hills and isolated peaks are higher and pass further east than in the north. They are better wooded and the valleys between them are more highly tilled, especially with sugarcane and betel-palm gardens, and they are also better supplied with water, dotted with old ponds and lakes, some of them two or three miles long though of no great depth. Near Tilvali, about twelve miles south of Hángal, a grassy bush-covered country is adorned with a thick forest of wild date-palms. The extreme south is crossed from west to east by narrow and steep parallel ranges 400 to 600 feet above the plain.

East of the Poona-Harihar road, in the south and south-east, the country is rocky, bare, and uninteresting, broken by ranges and blocks of stony bush-covered hills, which at Aironi and Karur in the extreme south rise 500 to 700 feet above the plain. To the north of the southern hills the black soil valley of the Varda crosses the district from west to east. Further north, and east of the belt of Sávanur-Patvardhan villages, the gold-yielding range of Kappatgudd stretches thirty miles north-west from the Tungbhadra. its three or four lines of bare hills rising near Dambal in a steep flat ridge about 1000 feet above the plain. North-east from Dharwar and Hubli, across the whole breadth of the district, a black soil plain, broken by a few isolated sandstone peaks 300 to 700 feet high, drains north-east into the Bennihalla and other tributaries of the Malprabha. This black soil plain varies greatly at different times of the year. During the rainy and cold seasons, from July to March, the plain is a broad stretch of rich crops of grain, pulse, oil plants, and cotton. In the hot months, though the heat is never so extreme as in parts of Bijápur, the black plain gapes in deep fizzures and its bare monotony is relieved by few trees or shrubs and by almost no traces of tillage. Clouds of dust sweep before the parching wind, or move across the plain in huge pillars a hundred feet high. The cheerless view ends in an even wall-like line of sandstone hills.

There are five chief ranges of hills, the Buddangudd in the west, the Airáni in the south-east, the Kappatgudd in the east, and two nameless ranges in the south. The Buddangudd range in the west, separating Kalghatgi from Hubli, is about eight miles long from north to south and about a mile broad. Its highest peak rises about 500 feet above the plain. The hills forming the range are steep, with ridged tops, and are covered with grass and brushwood. This range contains several quarries of good building stone. Smaller hills covered with forest trees lie to the west and north-west. The Airáni range in the south-east corner of the district with a break of five miles runs ten miles from north-west to south-east. The hills of this range are 200 to 700 feet high, those in the north being bare and those in the centre and south covered with brushwood. The highest hill in the range near Airáni on the Tungbhadra is one and a half miles long half a mile broad and 500

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Description.
Aspect.

The East,

HILLS.

Chapter I.
Description.
Hulls.

to 700 feet high. The top is pointed, the sides are sloping and woody, and the plain for a mile or two at their base is covered by the only anjan Hardwickia binata trees in the district. Antelope and wild pig are found in the northern and wolves in the southern hills.

The Kappatgudd Hills,

In the east the Kappatgudd range, of iron-clay and slate with traces of gold, rises a little to the south-west of Gadag, and, with ridged or pointed crests, covering a tract four to five miles broad, stretches about thirty miles south-east to the Tungbhadra. Near Gadag the hills are of no great height and are broken by gaps, For about fifteen miles, as far south as Dambal, the range continues irregular and broken, a group of hills some four miles broad with no marked central range and no point more than 500 feet above the plain. Near Dambal there rises a short flat-topped central ridge about 1000 feet above the plain, which, at the south end, breaks into three or four parallel spurs covering at the broadest a tract about five These hills are 300 to 400 feet high. They are bare miles across. even of brushwood, with steep sides and irregular outline, broken by conical and rounded peaks. After a time they gradually close into one range which though cut by the Tungbhadra continues beyond the river. The Kappatgudd hills are crossed by four passes. A well marked level pass between Doni and Attikatti, a winding level pass through much broken ground opposite the village of Harogeri, a footpath over steep and broken ground sometimes used by laden bullocks opposite the Sangli village of Hire-Vadavatti, and a pass fit for carts opposite the village of Irapur. Except by the last hardly any traffic moves through these passes. A fow panthers and wild pig are found on the Kappatgudd hills. Of the two parallel ranges in the south which rise 400 to 600 feet from the plain, the northern stretches fourteen miles east and west and shuts out the Masur valley from the north of Kod, This south range, which is a well-marked chain or ridge of hills, is covered with grass and brushwood and formerly gave cover to bears and other large game. Besides a few passes fit for ponies and bullocks there are two cart-roads, one of seven miles between Hirekerur and Masur, and a second of five miles between Ratihalli and Masur. ten miles further south is the southern range which forms the boundary between Kod and Maisur. This range, which is steep and narrow, contains panthers, bears, and occasionally tigers. highest hill is Márávli (600 feet) called after a village of that name within Maisur limits. The Maravli hill is scantily covered with trees. It is crossed by steep tracks fit for ponies, and, at each side of the hill, runs a cart-road from Masur to Shikarpur in Maisur. The rest of the range is low and dies away near the Tungbhadra. Another noteable hill in this range is Madak near the Madak lake, about ten miles south of Hirekerur. The sides are bare and steep, and round the top a ruined wall encloses a space 300 yards by 200.

Besides these ranges detached hills are dotted over most of the district. In the north are the three isolated sandstone hills of Navalgund, Nargund, and Chik or Little Nargund, running northwest to south-east. The Navalgund hill is 2640 feet long 990 feet broad and 300 feet high; the Nargund hill, about twelve miles north

of Navalgand, is 9174 feet long 3000 feet broad and 700 feet high; and the Chik Nargund hill, about three miles north of Nargund, is 6165 feet long 2640 feet broad and 250 feet high. All three hills are steep in parts, with bare ridged tops, and sides covered with prickly-pear. The Nargund hill is crowned by a ruined fort. In the north-west are several hills one hundred to three hundred feet high. The chief are Takarinpur about six miles, Sidrayanmardi about thirteen miles, and Durgadgudda about eighteen miles west of Dharwar; and Pedadkanvi and Hullimardi about thirteen miles and Tolanmardi and Topinhatti about sixteen miles south-west of Dharwar. Of these hills the highest is Tolanmardi about 300 feet. Sidráyanmardi Hulimardi and Durgadgudda are covered with brushwood, and Pedadkanvi Tolanmardi Topinhatti with trees. None of them are tilled either on the sides or tops. Two miles north-east of Hubli is the steep and bare ridge of Doddagudd, about a mile long 220 yards broad and 300 feet high. In the west, about four miles west of Kalghatgi, is Ganigudd hill, about half a mile long a quarter of a mile broad and 400 feet high. In the south-east, in the Karajgi sub-division, there are several hills. At Devgiri, about six miles south-west of Karajgi, is a noteable hill 300 feet high crowned by a temple of Tirmalappa. At Kanvali, about eight miles south-east of Karajgi, is a conical hill 400 to 500 feet high. Two small pointed hills rise at Kabur twelve miles south-west of Karajgi, several conical bare hills about 150 feet high mark the neighbourhood of Motibennur, and a low bare range stretches north-west and south-east from Biádgi to Halgiri close to Ránebennur and separated from the Airáni hills by eight miles of flat country. In the east, about twenty-three miles south-east of Gadag, the bare, steep, and flat-topped hill-fort of Mundargigudd stands in the plain 200 feet high.

Except a few streams in the north that drain west into the Bidtihalla or Gangávali, the rivers and streams of Dhárwár belong to one of two systems, those of the south-west south and south-east that drain into the Tungbhadra, and those of the northern half of the district whose channels run north and north-east to the Malprabha. The only two rivers of importance, the Tungbhadra on the south-east and the Malprabha on the north-east, bound the district on those sides without passing within its limits.

Two streams the Tung and the Bhadra rise in the south-west frontier of Maisur, and after north-easterly and north-westerly courses of fifty to sixty miles, near Kudli in Maisur, join to form the river Tunghadra. The united stream, after a winding course of about thirty-five miles, touches Dhárwár in the extreme south-east and from that point winds north-east about eighty miles till it enters the Nizám's territory in the south-east of Dambal and falls into the Krishna after a total course of 400 miles. Though in the dry scason the Tungbhadra runs low enough to be forded, during the south-west rains it fills a bed over half a mile broad, down which floats of timber pass from the western forests to the open east. In March 1873 a large ferry boat was safely floated from Harihar to Hesrur in Dambal where the river leaves Dhárwár, a distance of fully eighty

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Description.

HILLS.

Detached Hills.

RIVERS.

The Tungbhadra.

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Description.
RIVERS.
The Tungbhadra.

miles. At other seasons the river is not navigable. The bed is at places of sand and black earth, but is generally rocky with steep To clear the channel would be a work of great labour and would probably lead to little development of traffic. At Harihar, a large Maisur town on the right bank opposite the eastern limit of Dhárwar, the greatest flood discharge is calculated at 207,000, and the ordinary discharge at 30,000 cubic feet a second. The water of the Tungbhadra is not used for irrigation. Opposite the Gadag village of Koralhali huge blocks of stone mark the site of a costly embankment which according to local story gave way immediately after it was built. At Harihar the river is crossed by a fine stone bridge of fourteen spans built in 1868 at a cost of £35,000 (Rs. 3,50,000). During the rains there are ferries at Kusgatti, Mudenur, Airáni, Hirebidri, Chandápur, Haralhalli, and Hávanur. The ferry boats are round wicker baskets covered with leather and three to fifteen feet broad.

The Varda.

During its course along the south-east and east borders of Dharwar the Tungbhadra receives the drainage of the southern half of the district. It has three large feeders, the Varda the Kumadvati and the Hirehalla. The VARDA, rising in a hill near Ikeri in North-west Maisur, after a northerly and north-easterly course of about forty miles, enters Dhárwár at the village of Gondi in the Hangal sub-division, and, after winding north-east and east for about fifty miles, falls into the Tungbhadra near the north-east corner of the Karajgi sub-division about thirty miles north of Harihar. It is 100 to 200 yards broad and flows over a sandy or stony bed, generally between steep banks of earth. It is full and deep in the rains, and in Karajgi, when there is a heavy rainfall, it rises to a great height, overflows its banks, and lays the country round under water. In the fair season it lies in long reaches divided by shallows, which are passable for carts between the 10th of November and the 20th of May. Though it is not used for irrigation the riveraffords a plentiful and unfailing supply of drinking water. At Konimelehalli, about six miles south-east of Bankapur, the Varda is crossed by a bridge of seven arches of fifty feet each and two of ninety-five feet each. During the rains there are ferries chiefly at Gondi, Mulgund, Adur, Devgiri, and Karaigi. The ferry boats are generally wicker baskets like those on the Tungbhadra.

The Dharma.

The Varda's chief feeder is the Dharma, which joins it from the left in the north-east corner of Hangal. The Dharma rises in the Sahyadri hills about twenty miles south-west of the town of Hangal, and after a north-easterly course of about thirty-five miles falls into the Varda about seven miles south of Bankapur. It is a small stream during most of the year. At Shringeri, about five miles west of Hangal, an old dam supplies a canal about twelve miles long, which feeds upwards of twenty-four large ponds and waters a large area of rice and sugarcane.

The Kumadrati.

In the extreme south of the district the Kumadvatt, rising in North Maisur, after a northerly course of about forty miles, enters Dhárwár about two miles to the south of Masur in Kod, and passing through a gap in the low range of hills in the south of that sub-

division, after a north-easterly course of about twenty-five miles, falls into the Tungbhadra near Mudenur about eight miles southwest of Harihar. The stream flows between steep banks over a bed fifty to a hundred yards broad, which is sandy and shallow with long deep reaches. An old dam on the western border of the district, thrown across the river by the Vijayanagar or Anegundi kings (1336-1587) turns the Kumadvati into a large lake called Madak, entirely within Maisur limits. Two more embankments were also thrown across other gaps in the hills to the right and left of the Kumadvati valley to keep the waters of the lake from passing through them, and a waste channel was cut along the hills for the overflow waters. In some unknown flood, said to have happened soon after the work was completed, the water burst through the most westerly of the three embankments, and it is through this that the river new flows. In 1861 the old water-works which had fallen to rain were partially restored by building a data across the Kumadyati where it leaves the Madak lake, and cutting two irrigation channels, one on the right and the other on the left. The lake is about a mile long and in 1882-83 watered 480 acres. The top of the old dam is far up the hill-side.

The Hirchalla.

Chapter I.

Description.

RIVERS

The Kurmdrati.

The HIERMALIA rises in the Kappatgudd hills near Lakkundi about seven miles south-east of Gadag, and, after flowing south about twenty miles, joins the Tungbhadra at Rati six miles south of the bare hill-fort of Mundargigudd. A little above its meeting with the Tungbhadra the Hirehalla is about 500 feet broad. There is little flow of water in the hot weather, but during the rains its broad sandy bed is generally full. The banks are sloping and are of earth and gravel. The water is not used for irrigation.

The Malpralia.

The Malerabna, or Mud-Bearer, forming the north-east limit of the district for about sixteen miles, receives the drainage of all the Dharwar streams which flow to the north and north-east. It rises to the south-west of the town of Belgrum, and after flowing east about sixty miles through that district, it passes for about twentyfive miles through the Southern Maratha States. Then for about sixteen miles it forms the boundary between the Ron and Navalgund sub-divisions of Dharwar and the Badami sub-division of Buanur. Beyond Dharwar limits it passes north-east for about forty miles through the Badami and Hungand sub-divisions of Bijapur and falls into the Krishna at Sangam ten miles north of Hungund in Bijapur. Though during the rains it is a large stream, in the fair season the Malprabha has but a slight flow. Within Dharwar limits the bed of the river, which is muddy and sandy, is 350 yards wide and its banks are sloping and earthy and about twelve feet high. Its water is not used for irrigation. The Dharwar feedors of the Malprabha include almost all the streams of the northern half of the district. Except the Bennihalla none of these are of any size and during the list months all are dry.

The Bennihalla, or Butter-Stream, rises at Dhundshi in Bankapur, flows north through Hubli Navalgand and Ron, and falls into the Malprabha before it turns north to pass through the Badami hills. It flows between high and steep banks of earth with a soft muddy bottom

The Bennihalli.

Chapter I.

Description.

RIVERS.

The Bennihalla.

150 to 200 feet broad. Though very rapid in the rainy season, sometimes causing serious damage to crops, during the hot months water remains only in pools. Its high and steep earthy banks and muddy bottom make it difficult to cross during all except one or two of the driest months, and the fine earth in the bed of the river, though outwardly hard, is so soft that animals are said to have been swallowed up in it. It is a serious obstacle to the traffic of the east of the district. It is bridged on the Karwar-Bellari road; wooden bridges at Helisur and Yargal decayed and have been pulled down. Near Navalgund, about forty miles from its source. the Bennihalla receives from the north the Tuphrihalla or clarified butter stream, after a course of thirty-five miles from Kittur in Belgaum through the sub-divisions of Dharwar and Navalgund. From the height of their banks and the long period through which their stream ceases to flow the waters of the Bennihalla and its feeders are little used for irrigation. Their water is also so brackish as to be hardly drinkable, and throughout the greater part of its basin good water is scarce. In times of flood the Bennihalla and its feeders carry off so much black soil that it is probably their waters which have given the Malprabha its name of mud-bearer.

The Gangdrali.

The Gargávall or Bidtihalla river, which falls into the sea between Gokarn and Ankola in North Kánara, has two of its sources in the sub-division of Dhárwár. One of these streams, which is called Bidtihalla, rises in the big pond at Mugad about eight miles west of Dhárwár; the other, which is called Shalmalla or Kallhalla, rises at Hoskatti about two and a half miles south of Dhárwár. These two streams flowing south join at Sungedevarkop, about three miles east of Kalghatgi. After their meeting at Sungedevarkop the streams go by the name of Bidtihalla. At Bagodgeri a dam was thrown across the united stream in 1871 and a canal cut five or six miles to the south. Through some fault of construction this work has proved a failure.

WATER SUPPLY.

In the black plain to the north and east of the district the small streams dry early in the hot season and though as a rule water is found by digging in their beds, it is too brackish to be fit for drinking. The people depend on the supply which has been stored in ponds during the rains. This, parlly from the difficulty of finding suitable pond sites in so level a country and partly from the scanty rainfall, does not meet the wants of the people. The well water is also apt to grow brackish, so that during the hot mouths the people of the plain villages are often put to serious inconvenience. They have sometimes to fetch their water two or three miles, while many have to move with their cattle to the banks of the Malprabha and Tungbhadra. In the hilly west and south, where there is a much more pleutiful rainfall, the supply of water is abundant.

GEOLOGY.

1Dharwar contains specimens of granite, transition rocks, old red sandstone, trap rocks, and an iron-bearing claystone.

¹ The geological portion is prepared chiefly from Dr. A. T. Christie's and Captain Newbold's papers on the geology of the Southern Maratha Country in Carter's Geological Papers of Western India, 328-378.

At Ron, about fifty miles north-east of Dharwar, granite is found with a dark-red felspar with small scattered crystals and minute veins of quarts. Throughout the felspar are many small bag-like hollows some of them lined with tiny crystals apparently of chlorite. North of Gadag the hypogene schists and granite stretch to Gajendragad in south Bijapur where they are covered by sandstone. On the road northwards from Lakmeshvar in Savanur granite occurs in low bosses and detached blocks, and rises into a few clusters at the town of Kul Mulgand. In Bankapur numbers of granite boulders lie in unbroken lines generally parallel with the ranges of hills, but sometimes ranging more north to west. They often rise little over the surface, but more often, especially at Karajgi, stones varying in size from an egg to a cart-wheel are piled into large mounds. The texture is nearly as granular as gueiss.

Transition rocks fill a large part of the district. They stretch from the east and south where they succeed the granite to the western foot of the Sahyadris, being only in a few places broken by the granite which protrudes from beneath them. In parts of the Sahyadris they are covered by claystone and trap. In the north transition rocks are found only in the bottoms of the valleys which cross the sandstone hills; and in the centre and south they are covered by large plains of black cotton soil. To the west of Dharwar the transition rocks form parallel ranges with a general south-east direction, the same as the direction of the strata of which they are composed. The chief rocks of this series are clay-slate, chlorite schist, talc-slate, gneiss, limestone, and quartz. The strata, which are generally highly inclined and in many instances vertical, seem to have a general direction of north-west and south-east.

The rocks composing the hills round Dharwar are schists passing into slates and shales. The general structure which is perhaps more schistose and shaly than slatey, varies from a massive and obscure slate to fine plates and from compact and flinty to soft and sectile. The fine plates are nearly vertical and generally run parallel with the prevailing line of elevation which is north-west and south-east. The inlayering with beds of quartz rock and the jaspideous rock which generally forms crests and mural ridges on the hill is obscure. The lines of cleavage in slates are not necessarily those of the layering tops, cleavage lines being often caused by the arrangement of mica, chlorite, or tale. The rock passes from a green chloritic schirt into all the shades of white, yellow, red, and brown, sometimes singularly arranged in stripes, in contorted and waving bands, rod and white being the prevailing colours. Felspar in a clayey state of disintegration is the provalent mineral blended with quartz and tinged with iron. The white varieties seldom contain flut enough to give them the character of knolin. This variety which in hand specimens appears like percelain earth is found in large quantities at Dhárwár. It has an obscure slatey structure, the red varieties

Transition Rocks.

Clay Slate.

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Description.
Geology.
Granite.

¹ Owing to the soft nature of the clay-slates wells are easily dug at Dhárwár. Sometimes red and sometimes white clay-slate occurs at the surface, the white to a depth of seventy feet. Some of the varieties when weathered assume a yellow ochre colour.

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Description.
Geology.

with which it is associated being distinctly slatey. At Dharwar these rocks are stratified. Several varieties are often found within a short distance of each other in the larger stratum and they are almost always crossed by thin veins of a brown quartz. Besides by the strata seams they are generally crossed by other parallel seams which pass though the strata.

Ohlorite Slate.

Chlorite-slate is widely distributed through the centre and south of the district. Iron pyrites is seen in the rock which, particularly in the neighbourhood of trap dykes, tends to the prismatic and rhomboidal forms in which plating, though generally obscure, is sometimes distinctly traceable. A system of joints running nearly at right angles with those of the plating often intersects the whole group of the schists. Near Dhárwár is a variety intermediate between chlorite-slate and clay-slate. It has a bluish gray colour, a slightly greasy feel, is hard, and has a coarse slatey structure. From Banvási in North Kánara the chloritic and coloured schists and slate-clays continue cast-north-east to Sávanur.

Gneiss.

The rocks which form the Kappatgudd ridges of hills and the neighbouring country for miles together belong to the gneiss They have been subjected to immense disturbances formation. producing great contortions and fractures and in parts a much higher degree of metamorphism than is usually met with, which adds greatly to the difficulty of unravelling the very obscure stratigraphical features of these hills. Within the limits of the gold tract the ridge is single and its structure is simple. Further north the hills show a double series of hæmatite schist beds intercalated between chloritic and other schist of great thickness which to the east touches a broad band of highly silicious and often granitoid gneiss on which stands the town of Gadag. No section showing the exact relation of the two series is found, but it is probable that the granitoid series which may be called the Gadag series overlies the chloritic and ferruginous beds. Further south a third hæmatite schist-band appears at a little lower level also accompanied by chloritic, hornblendic, and micaceous schists, and bends round on itself in a sharp curve immediately north of the Kappatgudd hills, thus forming an anticlinal or dip-parting ellipsoid which is crossed by the road running from Dambal to Sortur. series may be called the Dhoni series from the village of Dhoni which stands on it. It is noteworthy because it contains several important beds of gray and greenish-gray crystalline limestone of considerable The chief beds lie in two groups, the one two miles thickness. north-west of Dhoni, the other three miles south-west of that

¹Captain Allardyce who examined the rocks about Dharwar found that for an area of fifty to a hundred miles the direction of the lamine and of the stratification kept constant to one point namely north-west by north. He adds, one may pick a fragment of chlorite slate of a triangular pyramidal outline, the external planes of which will be ferraginous, while the interior is divided into minute lamines not ferruginous, and coincident with only one of the planes. Examination of the rock in place shows that this minute lamination is vertical and invariably divided north-west. Ay north, conformable, in short, to the line of elevation. The chloritic schist north of Dharwar is of a bluish green greasy to the touch, and sometimes so massive as to make a good building stone. Geological Papers of Western India, 362.

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Grotogy.
Gneiss.

village. Overlying this to the west are other hæmatitic beds which along with their northern representatives may be called the Kappatgudd series from their forming the mass of the Kappatgudd hill. The character of the associated schistose beds has changed from chloritic to argillaceous, and the predominant colours of the rocks from green to reddish buff or mottled white. Owing to the great development of cleavage the true dip of these argillaceous schists is in many places completely obscured and their relations to the rocks next them to the west are very problematical. This next series consists of chloritic and hornblendic schists intimately associated with a massive dioritic rock. This dioritic rock, though in parts strongly resembling some of the diorites forming trap dykes which occur so frequently in the gneissic region does not appear to be an irruptive rock but rather a product of excessive metamorphism. The schistose rock appears to pass by imperceptible graduation into the highly crystalline mass. The two dissimilar rocks are never in close opposition, but everywhere some feet or yards of rock intervene showing the graduation of the special characters. This series, which may be called the Sortur series after the village of that name, occupies a band of country four to five miles broad which is bounded to the west by a band of granitoid gneiss of undetermined breadth. The position of this granitoid band, which may be called the Nulgund series relatively to the Sortur series, is uncertain; it is probable that the Sortur series is the younger of the two.1

Gneiss is also seen at Lakmeshvar in Savanur on the bank of a stream running nearly east and west with a dip of 35° towards the south, and further north it rises into a low round-backed ridge.

Among the gneissic rocks are several conspicuous hematite schist beds. These, with others parallel to them, stretch south-east to Kittur and Dharwar with a change of strike. A moderate-sized hæmatite schist-bed of a rich and dark purple and dipping east by north at a high angle forms a well-marked buttress on the southeast side of the Chik Nargund hill. Further south at Nargund, about thirty miles north-east of Dharwar, a species of gneissic rock appears with a strike which is almost invariably north-north-west varying to north-west by north. The lower part of the hill, which rises abruptly from the black plain, consists of schistose varieties of gneissic rocks which are capped by several feet of typical quartzites forming a narrow plateau about a mile long with a very fine series of precipitous scarps all round. The contact of the basement bed and underlying gneissic schist is seen on the path leading up to the Nargund fort. At that spot the schist is a gray to purple gritty micaceous schist dipping 50° to 70° east by north. On the schist is a bed of brecciated quartzite conglomerate from one and a half to four feet thick, overlaid by bluish waxy quartzite, and this again by buff and pale salmon beds. On the summit the beds dip from both ends towards the centre with a slight southerly inclination at angles of 5° to 10°. The west end is rather higher than the east end and is about 1000 feet above the plain.9

1 Mr. Foote's Report in General Department, XXII. of 1874.

² Memoirs of the Geological Survey of India, XII, (Part I.) 101-103.

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Description.
GEOLOGY.
Talc Slate.

Limestone.

Talc-slate occurs in the centre of the district. Here talc is frequently mixed with quartz, and the rock has the general appearance of mica-slate. At Nargund and Chik Nargund the strata of this variety have a nearly vertical dip, and their direction is south-east by south. In the south-east of the district, potstone and scapstone are found associated with the talc-slates.

In the north-east of the district limestone of a yellowish, gray, blue, and whitish colour is found. Its strata are highly inclined and their general direction appears to be north by west, and south by east. The fracture is generally flat conchoidal.

Quartz.

Chik Nargund hill is capped by an inclined plane of quartzites dipping 30° to 35° north-east. The north side of the inclined plane is probably faulted against the gneiss, but the base of the hill is so obscured by talus or rock-ruins cemented into a breccia by the soaking in of tufaceous limestone that it is impossible to trace the fault. In the whole country from Dhárwár to beyond Kittur in Belgaum the quartz occurs in large beds forming summits of parallel ranges of hills. These beds have resisted the attacks of weather while the soft clay-slates with which they are associated have given way. The quartz in these beds is in general deeply coloured with iron'; but there are some varieties which have a gray colour, a splintery fracture, and a resemblance to hornstone. In many instances the base of the rock is white or gray and is crossed in all directions by dark-brown veins highly charged with In some specimens the dark-brown variety is in much larger quantity than the white basis; and then the white appears as if it had been broken into a number of small angular fragments which had been afterwards united by the consolidation of the brown variety from the fluid form. This variety, containing numerous small hollows which are lined with red hæmatite in the shape of stalactites, or having a blistered or mammillary form, is found in the Kappatgudd range.

Old Red Sandstone. Old red sandstone occupies all the north-east corner of the district. It also forms the summits of the Navalgund and Nargund hills on all of which it appears in large tabular masses. These hills have horizontal strata, level summits, and for many miles keep the same height. At Navalgund the sandstone rests on granite, and at Nargund on the talc-slates of the transition class. In the hills of Nargund and Chik Nargund both the sandy and the compact varieties are found very near each other. In one part of the Chik Nargund hill the compact variety has on a large scale somewhat of a spheroidal structure. In the south-east of the Nargund hill is a large mass of a diaphanous quartz of bluish colour and with scattered grains of felspar.

Trap.

Trap rocks do not occur in great abundance. Basaltic green stone, also called diorite, consists almost wholly of hornblende, being largely granular and entirely crystalline and of a dark-green colour. It occasionally appears mixed with spots of white and light green when it is composed of equal quantities of felspar and hornblende. Dykes of this formation sometimes stand from

the surface in long ridges which appear like lines of rocks. In other places greenstone occurs in loose spheroidal blocks and pieces on the surface and partly imbedded in the soil generally pointing to an underlying dyke. Granite and greenstone dykes are occasionally seen at the base of the hills west of Dharwar and Hubli. where the jaspideous and chloritic schists forming these hills bear evident marks of the alteration produced by the intrusion of these dykes. From Hubli south to the Maisur frontier such greenstone dykes become more frequent. Near the centre of the Kappatgudd hills an immense dyke of basaltic greenstone emerges from the base of the strata. Numerous smaller dykes cross other parts of the extensive plain to the west, north, and east of these hills. Near Sávanur dykes of green-stone become more frequent accompanied by depositions of limestone which fills fissures in the schists and overspreads their surface beneath the alluvial soil. The direction of the beds at Sávanur suffers a deflection after leaving Dhárwár of about 40°, being nearly due north and south, dipping at an angle of about 40° towards the east. They end on the north-east between Savanur and Gadag close to Lakmeshvar. Here a spur from the chief north and south line of elevation runs nearly east and west dipping towards the south. Several similar spurs are crossed between Banvási and Lakmeshvar, and the dykes of the greenstone run in a similar direction.

Iron-bearing clay-stone or laterite occurs in different parts of the district, but chiefly in the west. In different stations it is found resting on granite, transition rock, trap, and sandstone.

The climate of the district is on the whole healthy and agreeable. It is pleasantest in a tract parallel with the Sahyadri crest between the western forests and the treeless east, within whose limits lie Dhárwár, Hubli, Kod, and Bankápur. The year may be divided into five seasons. Shower months from the middle of April to the beginning of June; the south-west rains from June to October when the climate is cool and damp; the north-east rains in October and November; the cold months December, January, and half of February; and the hot months, with harsh east winds, from the middle of February to the middle of April. first signs that fresh south-west rains is beginning are the morning fogs that often cover the country till about nine o'clock in March. The air is hottest about the beginning of April, the temperature sometimes rising to 100° or 103°. By the middle of April the height of the hot season, which is never severe, is over. The easterly winds blow with less force and at times give way to a westerly breeze which lowers the temperature in the day time and cools and freshens the nights. During the calms between the regular east and west winds, towards the end of March and in April, whirlwinds or as they are locally called dova-gháli or devil winds are common. A number of dust columns in the form of a speaking trumpet or a waterspout chase each other over the treeless plain from east to west or south-east to north-west making a vortex of heated air whose whirl raises dust, sand, straw, baskets, clothes, and other light articles sometimes 200 to 300 feet high. They come Chapter I.
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Trap.

Iron-bearing Clay Stone.

CLIMATE.

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and go with great suddenness with a startling rush from all sides to a central axis round which the air whirls furiously.1 For a time the east wind blows by day and the west wind by night. By the middle of May the west wind begins to freshen and lasts through the day. After the west breeze has set in short sharp thunderstorms with rain and hail are common. These early showers are very useful. They fill the ponds, cover the country with fresh grass, and soften the soil so that the rice lands are ploughed and sown, and by the end of May are green with young rice. Towards the end of May the west wind begins to blow stronger, banks of cloud gather in the south-west, and in the west early in June, about a week after it has broken on the coast, the regular south-west rains set in. The first heavy showers come from the east. During the day the wind blows steadily from the south-west, till between three and five in the afternoon black clouds gather in the east. Then cloud rises over cloud until the whole eastern sky is one dense black mass which with lightning and thunder moves slowly against the western breeze. When the mass of cloud draws near, a sudden and strong east wind brings heavy battering rain and sometimes hail. During the storm the direction of the wind changes frequently until it sets steadily from the west, and the tempest ceases. These storms take place daily for several days and after they are over for five or six months the wind continues to blow constantly from the west. Storms also occur at the autumnal equinox, but neither so regularly nor so violently as at the close of May. Though there is much wet weather at Dhárwár, the rain seldom falls in such deluges as on the coast, and the whole yearly supply is less than either along the western coast or along the Sahyadris. During the early months of the south-west rains the eastern sub-divisions have but a small share. Most of their rain falls about October.

At Dhárwár and Hubli most rain falls in May, July, and October; towards the east and south the fall in May and October is greater than in July. The Poona-Harihar road, running north-west and south-east, divides the district into two belts, a west belt of steady and of comparatively heavy rain, and an east belt of uncertain and

¹ Kies' Southern Marátha Country, 18. Lieutenant Moore describes one of these whirlwinds in 1790. The day after Major Sartorius marched from Dhárwár so furious a squall and whirlwind passed over the ground he had left, that nothing could withstand its violence. Two or three gentlemen who remained on the ground sick, had their tents and furniture swept away. We saw the remains of a chair that had been so whirled about and battered as to leave little trace of its former shape. We found Dhárwár particularly subject to whirlwinds. Scarcely a day passed without perhaps a dozen being seen, and on most days several visited our line. They may be seen at a great distance in the form of an immense column moving irregularly with considerable rapidity and with a great noise. Clouds of dust, and anything light, such as pieces of paper cloth and leaves, are whirled to a height beyond the reach of the eye, forming a column perhaps twenty or thirty feet at the base. Most are strong enough to knock over a tent unless well secured. The confusion when one came among the tents and huts of ours or of the Marátha camp was ludierous. It would beat down a hut, and carry with it the only dress of the inmates who might be seen in half-naked pursuit. Sometimes the wind would scatter fire and burn huts and tents. Every one called them devils, and when one drew near all began to shout and abuse it, so that between the noise of the devil itself and of the devil's abusers good warning was given of its approach. Narrative of Captain Little's Detachment, 49.

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scanty rain. In the western belt, both as regards the sufficiency and the seasonableness of the rain, the extreme west is more favoured than the country farther east. In the Dharwar sub-division west of the Belgaum road the rainfall increases every mile till near the western limit the south-west rain is fully fifty per cent heavier than at Dharwar.1 Among the western towns for which returns are available are Kalghatgi and Hángal, about seven miles from the western limit of the district. They have an average fall of thirty-one inches, the Kalghatgi fall varying from forty-six inches in 1882 to nineteen inches in 1871 and 1876, and the Hangal fall varying from sixty-four inches in 1882 to twenty-two inches in 1867 and 1876. Mugad and Dhárwár, about twelve and fifteen miles from the western border, have an average yearly rainfall of thirty inches, the Mugad fall varying from fifty-two inches in 1878 and 1882 to sixteen inches in 1865, and the Dhárwár fall varying from fifty inches in 1882 to sixteen inches in 1876. Hubli, about seventeen miles from the western border, has a fall varying from forty-three inches in 1874 to eight inches in 1865 and averaging twenty-three inches. And Misrikota, about ten miles from the western border, has a fall varying from thirty-one inches in 1861 to nine inches in 1865 and averaging twenty-two inches. Within fifteen miles to the east of the Poona-Harihar road the clouds, driven east by the south-west wind, have been so drained in the west that they yield nothing but a trifling drizzle. Another ten or fifteen miles further east the clouds fly high overhead without yielding moisture for weeks together. After another fifteen or twenty miles these rain-clouds seem again to condense, and water the earth in frequent showers during June, July, and August.2 If it were not for the north-east or Madras monsoon much of the country would be liable to famine. In the west of the eastern belt, with scanty southwest rain, are Shigaon on the Poona-Harihar road about six miles 'north of Bankapur with a rainfall varying from forty-four inches in 1882 to twelve inches in 1862 1863 and 1866, and averaging twenty-two inches; Karajgi, with a rainfall varying from thirty-four inches in 1873 to eight inches in 1866 and averaging twenty-one inches; and Ranebennur, with a rainfall varying from thirty-five inches in 1874 to five inches in 1863 and averaging nineteen inches. In the centre of the eastern belt, with little south-west rain, are Navalgund with a fall varying from forty inches in 1874 to six inches in 1863 and averaging twenty inches, and Gutal with a rfall varying from eighteen inches in 1867 to seven inches in 1865 and 1866 and averaging twelve inches. In the east of the eastern belt with seasonable south-west rain are Nargund with a fall varying from thirty-seven inches in 1878 to six inches in 1863 and 1865 and averaging nineteen inches; Gadag, with a fall varying from fifty-two inches in 1874 to six inches in 1866 and averaging twenty inches; Mundargi, with a fall varying from thirty-six inches in 1874 to two inches in 1876 and averaging nineteen inches; and Dambal, with a fall varying from twenty-five inches in 1870 to four inches in 1865 and averaging eleven inches. The details are:

¹Bom, Gov. Sel. CLXI, 4.

Bom. Gov. Sel. CLVIII. 97.

DISTRICTS.

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DHARWAR RAINFALL, 1861-1882.

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STATIO	N.	1801.	1862	1803.	1864.	1865.	1866.	1867.	1868.	1800.	1870.	1871.	1872.
Dhárwár Mugad Hubli Navalgund Nargund Gadag Shiggaon Ránchennur Hángal Karajgi Karajgi Karajgi Mundargi Dambai Mistrikoti Guttal	440 440 440 440 440 440 440 440 440 440	31 19 15 33 16 18 12 31 18 	24 20 16 17 13 13 12 7 23 10 	20 26 10 6 7 12 6 24 10 6 15	29 22 17 20 17 11 13 23 20 11 23 13	18 16 8 12 6 8 14 8 25 11 	20 16 10 7 6 12 8 23 8 	29 19 18 18 19 21 20 22 17 18 25 18	31 25 22 15 14 14 21 21 29 18 11 26 14	27 29 21 25 24 17 16 17 35 17 21 28	81 86 29 29 25 25 26 10 31 21 41	30 33 28 19 20 19 18 22 27 24 19 23	27 31 23 18 14 18 21 22 38 29 15
STATIO	۶۲.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1630.	1881.	1882		er- de
Dhárwár Mugad Hubli Navalgund Nargund Gadag Shiggaon Ráuchennur	***	27 80 21 11 13 16	48 43 43 40 30 52 27	31 36 18 15 20 21 21	16 23 14 7 8 8	35 36 40 80 29 31	40 52 42 33 37 39 35	38 32 31 24 24 25 28 33	35 23 25 24 21 27 27 23	32 28 21 15 16 20 25	50 52 37 34 32 36 44	8000	0-2 0-2 3-13 0-3 0-11 0-1

In the west, during October and November, the mornings often open with heavy fog and dew. As soon as the rains are over, before the beginning of November, a constant cold breeze sets in from the east or north-east. This wind brings with it the north-east or Madras monsoon. In the eastern sub-divisions there is generally a considerable rainfall at this time, and, in November and December, even as far west as Dhárwár, there are occasional showers.

Throughout the district, during December and January, the days are clear and cool, the nights cold, and the east wind bleak dry and piercing. In December and January there are generally heavy dews. About the beginning or middle of February the climate suddenly changes from cold to hot, the heat increasing till about the beginning or middle of April. The days are clear and hot, though the heat is never so trying as in many parts of the Bombay Deccan, and, except in the east, the nights are almost always cool. During these dry weeks, in the noontide glare, a traveller crossing one of the shore of a wide island-studded sea. This is the sun horse bisu lukudura or mirage and the islands are the twisted line of the distant hills.

Thermometer readings at Dhárwár for the five years ending 1882; give a maximum temperature of 99° in April 1878 and a minimum temperature of 58° in December 1882. During the four months from February to May the maximum temperature has varied from

86° to 99°, the minimum temperature from 66° to 74°, the mean maximum from 81° to 96°, the mean minimum from 70° to 77°, and the mean range from 7° to 22°; from June to October the maximum has varied from 75° to 90°, the minimum from 68° to 70°, the mean maximum from 72° to 94°, the mean minimum from 63° to 74°, and the mean range from 3° to 20°; and from November to January, the maximum has varied from 81° to 94°, the minimum from 58° to 70°, the mean maximum from 75° to 89°, the mean minimum from 62° to 71°, and the mean range from 6° to 23°. The following table gives the details:

Dhárwár Thermometer Readings, 1878-1882.

	Dhárwár Thernometer Readings, 1878-1882.													
Year,		Jan.	Teb.	Mar.	April,	May.	June	July.	Aug.	Sept.	Oct	Nov	Dec.	
1878.	Matlaum Misimum Mean Matimum Mean Minimum Mean Range	60 70 69 70 18	97 60 95 72 22	98 73 95 74 20	90 72 96 75 21	97 74 91 74 20	80 70 86 73 13	83 70 79 70 8	86 70 78 71 16	66 67 79 71 8	86 70 61 72 9	84 70 83 70 12	82 60 60 70 10	
1879.	Maximum Minimum Menn Maximum Menn Minimum Menn Range	81. 67 76 67	90 69 81 73	98 78 90 77 13	02 72 87 73 14	91 67 89 72 16	85 68 81 70 11	80 70 77 70	75 69 76 69	82 68 78 69 8	88 70 83 70 13	88 70 86 70 16	85 61 83 63 20	
1690.	Maximum Minmum Mean Maximum Mean Minimum Mean Rango	89 65 76 69 6	88 66 84 70 18	80 70 85 70	02 71 88 72 16	92 70 69 72	83 68 70 78 5	75 68 72 63 9	70 68 75 69 5	77 68 72 04 7	84 69 75 71 4	82 60 78 71 7	87 65 83 69 16	
188.	Maximum Minimum Mean Maximum Mean Minimum Mean Ringe	87 61 80 67	86 68 62 70	95 69 91 72 18	09 70 92 72 19	98 60 92 74 17	88 70 81 71 10	70 69 74 71 3	82 09 75 69 7	79 70 76 70	78 70 78 72 3	86 65 80 03 12	86 60 87 65 21	
1883.	Maximum Minimum Mean Maximum Mean Minimum Mean Range	88 64 85 68 17	02 68 89 71 18	08 69 92 71 21	90 72 93 73 19	06 68 93 73 19	88 70 80 72 8	88 70 76 71 5	87 70 81 71 10	84 69 79 70 8	80 68 82 71 10	67	00 83 20 20 20	

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CHAPTER II.

PRODUCTION.

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Parts of Dharwar are believed to have formerly yielded a considerable amount of gold. Even now the neighbouring villagers yearly wash small quantities of gold dust out of the sand of the Doni in Gadag and of some of the Kod and Ranchennur streams in the south and south-east. The hills in the neighbourhood of Dambal in Gadag and of Chin Mulgund in Kod are also to some extent gold-yielding. The beds of the Doni and other streams which have their rise in the Kappatgudd hills contain gravel and sand in which gold dust is found associated with magnetic iron sand, gray carbonate of silver, and copper. In 1839 the Collector of Dharwar forwarded to Government a few pieces of gold and some gold dust from the Kappatgudd hills, and, with the sanction of Government, sent one of his assistants to make further inquiries. The assay master, to whom the gold and sand were forwarded for examination, reported that the two pieces of gold weighed 151 grains, that their touch was 92.75, that the amount of puro gold was 14.37 grains, and that the alloy was silver. While at Sortur the Collector had two or three pots of gold dust washed which yielded gold worth about 6s. (Rs. 3). At the same time he sent to Government about five pounds of dust in which one-sixth of a grain of gold was detected. A further supply of gold dust, except that it contained particles of gold of a richer quality, yielded nearly the same result. In 1852 Lieutenant Aytoun was deputed to make a geological survey and report on the mineral resources of the Bombay Karnatak. He reported an exceedingly great development of iron pyrites in the gold region, and observed that were it not that all the conditions on which the large development of the precious metals depends were here found in conjunction with the pyrites, it might be imagined that the small quantity of gold found in the streamlets was derived from the iron pyrites.2 Lieutenant Aytoun seems not to have traced the gold to its source though he correctly inferred that the source was among the chlorite slate hills to the west. He mentions that he occasionally found small pepites of gold of a pear shape, but does not name the places where they occurred. In 1854 the Rev. A. B. Clarke, of

² The gold portion is compiled chiefly from a report on the auriferous rocks of the Dambal hills by Mr. R. B. Foote, F.G.S., in Bombay Government Records, General Department, XXII. of 1874.

² According to Mr. Foote except in clay schists near Atti-Katti, in which the cubical crystals are found in moderate numbers, the development of iron pyrites is

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St. Leonard's, New Sydney, applied for information on the subject of gold, and was furnished with the details of previous workings. 1863 he was informed by Government that though small quantities of gold had been always obtained from the Dambal hills, it had never been found in quantities large enough to repay the regular working of the fields by other than the persons resident in the place. In 1856 Mr. G. W. Elliot, assistant collector of Belgaum, was specially employed in examining the gold-yielding streams of the Kappatgudd hills. In 1858, after making inquiries, he forwarded a bottle containing a quantity of titaniferous sand and also another metal of great specific gravity which had the appearance of platinum. The bottle was sent to the Government Chemical Analyser who said that the sand consisted of silicious particles mixed with crystals of titanate of iron with very minute quantities of gold. There was no lead, platinum, or other metal, and the gold was in too small a quantity to repay the cost of working. In 1861, Mr. C. LeSonef, an Australian gold-digger, who had two years' experience in Victoria, offered to visit the place and make further search. He examined the Kappatgudd hills and wrote to Government suggesting that, instead of exploring the hills on the part of Government as he at first proposed, he might be allowed to examine them on behalf of a joint stock company. This was allowed on the terms usually granted by Government to such companies. In 1862, Mr. LeSouef informed Government through the Collector of Dharwar that he had discovered gold near Sortur which he could work at a profit, and that he had marked off a tract of land which he wished to secure for the company. In 1865 he asked that a certain block or blocks of waste land lying between Kumta and Hubli might be granted to him for the purpose of gold mining, so that the tract might not be intruded upon by other gold-mining companies, and stated that for all gold obtained he would undertake to pay Government a royalty. In 1866 he was informed that Government would take his application into consideration on his stating precisely the nature of the concessions he required and on his showing that his scheme had some chance of success. Before this letter was sent Mr. LeSonef disappeared. According to Mr. Foote, Mr. LeSonef spent £15,000 (Rs. 1,50,000) of the company's money and obtained no return except a few small nuggets of Australian gold which he sent to Bombay from time to time to allay the fears of the shareholders.1

In 1874, Mr. R. B. Foote, F.G.S., was sent to survey the hills. He gave the following account of this gold-yielding region: All the streams said by the people to yield gold rise within the limits of the tract occupied by the Sortur series to the west of the Kappatgudd range about twelve miles south of Gadag, and the upper course of the Sortur stream. The richest tract lies entirely within the area occupied by the pseudo-diorite and associated chloritic schists. Quartz reefs occur in all the rocks of this tract, but those lying within the limits of the Sortur series are the best marked, and, with a few exceptions, have the most promising lie,

¹ Bambay Government Records, General Department, XXII. of 1874.

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their direction being mostly north-west and south-east, or parallel to the strike of the bedding. The surface of the chief reefs has been much broken by gold-seekers. The quartz reefs occurring in the other series are mostly well-marked. With one or two exceptions, they run in different directions, many running in the lines of the strike of the hedding, and many cutting across the strike in various directions. The most remarkable quartz reef in the whole gold-bearing tract lies about a quarter of a mile cast of the castern boundary of the Sortur series, on the eastern slope of a ridge lying north-west by north of Atti-Katti, a small village on the road between Dambaland Sortur. This reef, which runs north-west and south-east. lies in the line of bedding of a series of reddish iron-clay schists with chloritic bands, both containing numerous cabical crystals of pyrites now converted into limonite by pseudo-morphosis. roof is rather less than half a mile in entire length and only in a small part of this is it a well-marked vein. Both the southern and northern extremities are very irregular in places, thinning to a mere thread or a few parallel threads and then swelling into bunches to thin out again a few feet further on. The reef does not cross the valley of a streamlet to the north, but thins out and disappears on the side of the ridge. The quartz is the ordinary dirty-white variety, and includes a few little scales of chlorite along the lines of jointing together with occasional cubes of pyrites, which, like those in the schists, have been pseudo-morphosed into limonite. Parts of the quartz are iron-bearing, the impure oxide of iron occurring in strings and lumps. A specimen of gold obtained here was imbedded in such an iron-bearing string. Though very small, it is easily recognised, and shows a great resemblance to various pieces of stream-gold obtained by washing. It is of a very rich colour. The piece of quartz containing the gold lay among the remains, beside the top of the reef at its highest part, where it has been much broken by gold-seekers, by whom irregular mining operations have been carried on along the course of the reef. Much of the reef has been completely broken, and the hill-side is thickly strown with fragments. There remain three rude sinkings, hardly deep enough to deserve the name of pits, and a considerable length of shallow trenching along the course of the vein. Besides these, an old pit is sunk on the east side of the wall-like part of the reef some little distance down the slope, probably with the object of ascertaining the continuity in depth of the reef. This seems to have been sunk by some one having more advanced ideas than the authors of the diggings on the back of the reef; but nothing certain or satisfactory could be ascertained. To the north-west of the reef a number of little short veins and bunches of quartz had been attacked in shallow trenches, and had their surfaces knocked to pieces by the same people, who were either a company of goldsmiths who lived in the now deserted village of Galigatti, or more probably by Mr. LeSonef who carried on the mining operations between 1861 and 1866.

The only positive trace of Mr. LeSonef's workings which Mr. Foote came upon or heard of was a pit about fifteen feet deep, sunk on the south side of a quartz reef belonging to another series lying south of the village of Doni about five miles west of Dambal.

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The Atti-Katti reef on the road between Dambal and Sortur has an average thickness of about five feet. The strike is north-by-west and south-by-east, with an easterly dip of 40° to 50°. Much of the reef has been broken, but a length of about thirty-five yards like a cyclopian wall forms a conspicuous landmark from the east.

The only other reefs deserving separate mention form a group lying about a mile to a mile and a half south of Doni village on the north-east flank of the Kappatgudd hill. Unlike the reefs already referred to, the reefs in this group consist not of ordinary milk-white quartz, but of a distinctly bluish or deep gray diaphanous variety, with a varying amount of enclosed scales of white or pale mica. According to their courses, these reefs may be assigned to two subordinate groups, of which the one lies north-west by south-east, the other north-east by east and south-west by west. The members of the latter sub-group are much the best defined and form dykelike veins five to six feet wide and 400 to 600 yards long. The other set, lying on the east side of the small stream which flows from the north-east side of the Kappatgudd hills into the Doni, a little east of the village of Doni, have less well-marked veins, but are of considerably greater length.

None of the reefs in the Doni series run in the lines of bedding of the chloritic, hornblendic, and micaceous beds which they cross. At the same time a large number of bunchy strings of ordinary milky-white quartz run in the lines of both bedding and cleavage, though too small to show on any but a very large-scaled map. These, as well as the diaphanous quartz reefs, contain remarkably little iron oxide, their superficial staining being mainly due to the decomposition of included portions on the surrounding rock.

The remaining quartz reefs, noticed in the gold-yielding tract on the east flank of Kappatgudd, on the west flank of the ridge running north and north-west from Kappatgudd, and in the valley to the north-west of Doni village, are all of the ordinary variety of quartz running more or less in the strike of the bedding and presenting no noteworthy peculiarity. As in all schistose rocks of the ordinary types, an immonse quantity of free quartz occurs throughout their mass in the form of laminæ, strings, and bunches of all possible sizes. From these strings and bunches rather than from the remains of larger veins in reefs, come the innumerable lumps of quartz which cover the face of the country. As most of the country is devoid of any vegetation except grass, all the larger occurrences of quartz are marked objects in the landscape, need but little search, and are easily prospected.

On account of the almost invariable association of gold with the different sulphides or iron, lead, and copper in quartz reefs, Mr. Foote, besides searching for metallic gold, paid great attention to the signs of the presence or the absence of sulphides. In only three reefs did he obtain positive evidence of the existence of a sulphide, the sulphide of iron, in the form of cubical pyrites. These three were the Atti-Katti reef and two parallel reefs to the east of Venktapur, but in each case the number of enclosed crystals was very small. It was largest in the Atti-Katti reef. Much of the quartz in the different

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reefs was what Australian miners technically call mouse-eaten. that is full of holes formed by the weathering of enclosed mineral substances. In the majority of cases the form of the holes showed that the enclosed mineral had been chlorite or hornblende. None of the hollows were cubical. In one reef in the Doni group Mr. Foote noticed some small and rhomboidal hollows probably due to the removal of enclosed crystals of calcapar. Free gold is often found left behind in such hollows in good gold-yielding reefs in Australia and elsewhere; none was found in the Doni reefs. all the reefs observed lay above the surface they had been specially exposed to weather. This might partially account for the absence of sulphides in the reefs; it would not account for the absence of the characteristic hollows which sulphides leave behind. In Mr. Foote's opinion the paucity of sulphides showed a proportionate paucity of gold. Mr. Foote, while prospecting, broke off several hundred pieces of quartz, but not one contained any visible gold; and the quartz found loose at the Atti-Katti reef contained but a mere speck. number of carefully chosen samples were brought from the most promising reefs to ascertain whether, as is often the case in Australian and Californian reefs, they contained gold in so finely divided a state as to be invisible to the naked eye. These were assayed at the Calcutta mint and in the laboratory of the geological survey, but none of them yielded gold. Mr. Foote noticed that, even if the reefs yielded a fair amount of gold, mining would have serious difficulties to contend against. No timber or fuel was available except at very great distances, and water was very scarce except during the rainy season.

Alluvial Gold.

Washing for gold in the sands of the various streams which flow through the gold-yielding tract is carried on by a class of men called Jálgárs. There were said to have formerly been a considerable number of Jálgárs: but in 1874 when Mr. Foote was in Dhárwár he could hear of only three, two of whom were at Sortur, and the third at Shirhatti in Sangli. He employed the two Sortur washers in the Doni, Sortur, Jilgeri, and other streams on the west flank of the Kappatgudd hills. Of these streams the Sortur was stated to be the richest, and this statement was borne out by the results. Next in productiveness came the Doni stream, but the yield was much smaller, hardly enough to pay the labour. The Jilgeri vielded a still meaner return. In the other streams, including the stream at the foot of the Kappateshvar ravine, only a few exceedingly minute spangles were obtained, just enough to show that gold was not entirely absent. The Jalgars' mode of working is to take up the lower part of the latest flood deposit from the rocky or clayey bottom of the stream-bed, not from the deepest part of the bed, but from the point at which a strong length of current slacks owing to a change in the direction of the stream. Another favourite place from which to collect wash-dirt is the small alluvial terrace between the low flood and high flood levels. From this they gather the rain-washed surface, and in the case of the washing in the Sortur and Jilgeri, gained much better results than from washing the material obtained in favourable positions from pockets in the beds of either stream. In the richest washing at which Mr. Foote was present in the Sortur, the wash-dirt chosen was a lime-crust which was deposited on the decomposing surface of a band of chloritic schist. The proceeds were unfortunately mixed with those of another washing which was going on at the same time a little further down the stream. The united results were said by the Jálgárs to be a very good day's work. The second washing was made from stuff collected at the base of the old alluvium bank, which there consisted of a bed of coarse shingle-mixed clay and fine iron-yielding pisolitic gravel (a product of decomposed iron pyrites), overlaid by black clay followed by a second but rather less coarse bed of shingle, on which rested the black soil of that part of the valley of the Sortur. The yield of this washing was rather less than that of the last. For the two washings Mr. Foote had four men at work for three hours at a place of their own choice. Two men washed and two dug and carried the material to the washing place. The quantity of wash-dirt put through the washing-box was about one and a half cubic yards. This yielded a trifle over 61 grains of gold, worth about 1s. 2d. (91 us.) at the rate of £3 174s. (Rs. 383) for the Troy ounce of gold. The method of washing was simple and at little expense might be made more effective. The wash-dirt is scooped with a stout broad short-handled hoe, and carried in a basket or large wooden trav to the washing-box which has been fixed at the water's edge and propped with stones to the required slope. The washer sits on a large stone in the water close to the side of the box, which is an oblong construction made of light planks and open at one end. It is three to three and a half feet long, twenty inches wide, and nine inches deep, and is strengthened with clamps. A stick of elastic wood is jammed against the sides and bottom at the lower and open end to form a catch. When this is done the washer begins to ladle water on the wash-dirt kneading it with his left hand and throwing out all the larger pebbles. The ladle or rather scoop used by the Jalgars was made of a gourd of the calabash tree Crescentia cujete, with one end cut off. It was held by the middle, an oblong hole having been cut into the incurved side, and a couple of small sticks tied across diagonally to the corners and fixed with strings passed through small holes. The older man preferred to use a tin-pot with cross handle, which had been given him by a former Collector of Dhárwar. This washing and kneading went on till a layer of sand formed in the box, so thick that the stick at the lower end was no longer a sufficient catch and a second stick was jammed in and the washing process begun again till the layer of sand had risen almost level with the second stick. Both sticks were then removed, the washer stirred the layer of sand with a short stout piece of wood, and then swept everything into the large wooden tray held below the open end by the assistant. The washer then took the tray, placed it in the water, and shook and washed it, till nothing remained at the bottom but fine sand most of it black. He then slightly tilted the tray, and, by judiciously dropping water out of his hand on the small layer of sand, drove the lighter particles forward and left the spangles of gold exposed. This small residue was carefully gathered by washing it into a half cocoanut shell, and was

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From the shortness of the taken home to be treated with mercury. washing-box and the very rude way of stopping the open end, and from the evidently careless style of handling, there was considerable Mr. Foote was satisfied that much better results would be obtained by using a box more like the Californian Long Tom, which is generally twelve feet long, and twenty inches broad at the top widening to thirty inches at the open end. In 1874 the Jálgárs plied their trade of gold-washing only after heavy rains during one month in the year in which there is little or no field work. Each man's share of the season's washings ranged from 10s. to £5 (Rs. 5-50). They affected not to know of any gold in place, and told Mr. Foote that he was wasting time in examining the quartz reefs. This opinion was borne out by the statement of the headmen of Doni and Sortur and of many other villagers. The same opinion was also held by the mamlatdar of Chikodi in Belgaum and by the mamlatdar of Gadag. Captain Newbold found (1842-1845) the banks of the gold-yielding streams crowded with Jalgars. The decline of the industry is probably due partly to the fall in the yield, and partly to the great rise of wages which had followed the inflow of wealth during the American War.1

Mr. Foote notices that the Jálgárs did not try to get wash-dirt from deep pockets in the beds of the streams, the places which were generally found most productive in Australian and Californian goldwashings. Constant heavy rain prevented Mr. Foote trying the most promising spots. He thought that the deep pockets might be examined in the dry weather by damming the stream and baling out the hollows. At the same time very little water would be available for washing. It was also probable that the people had already examined these places.

Captain Newbold (1842-1845) estimated the yearly outturn of wash gold from the Sortur, Harti, and Doni streams, after an average monsoon, at about 200 ounces. Mr. Foote was not able to ascertain the average outturn when the place was examined by him; he thought it might safely be set down at less than one-tenth of Captain Newbold's estimate. That so few washers were attracted proved that the return was small. In Mr. Foote's opinion the conclusion was that the prospects of success were not enough to justify an outlay of capital in large mining works. The stream gold was found associated with a black sand consisting mainly of magnetic iron in minute octohedra, and a black residue not affected by the magnet. In the sand washed in the Doni, Mr. Foote found several minute rounded grains of a gray motal, which on examination proved to be metallic silver. A couple of little spangles of a pale yellowish silvery hue were electrum, the natural

¹ Another writer on the Kappatgudd gold tract, Mr. Scholt, formed a very low estimate of the yield of alluvial gold. He stated that in his opinion the alluvial blind watercourses whose bed-rock was almost uncovered and showed a very scanty supply of wash-dirt. Twelve days' work at Sortur yielded Mr. Scholt about a penny-weight of gold worth 4s. to 6s. (Rs. 2-3). Bom. Gov. Rec. General Department-XXII, of 1874.

amalgam of gold and silver. Besides these, a few minute bronzecoloured grains proved to be a mechanical mixture of metallic
copper and oxide of tin. Captain Newbold found a small fragment
of metallic copper, grains of silver, and a few whitish metallic
spangles which he took to be platinum. In Mr. Foote's opinion the
occurrence of platinum was doubtful. Captain Newbold also found
gray silver ore in a fragment of quartz, but did not trace the source
from which the quartz came. In a green very traplike part on the
pseudo-diorite, about a mile north-west by north of Sortur, Mr. Foote
found numerous small but very perfect octohedra of magnetic iron
with numerous little lumps of copper pyrites and some iron pyrites.
Very white iron pyrites in minute parcels was also widely spread in
the neighbouring black variety of pseudo-diorite.

Besides gold manganese is found in considerable quantities. In former times when fuel was plentiful in the Kappatgudd hills and English iron was dear, much iron ore was smelted at Doni and other places in these hills. Iron is still (1883) smelted at Tegur on the Poona-Harihar road fifteen miles north of Dhárwár, and at Gulgi in Kalghatgi. The ore is of a darkish brown and has a specific gravity of 3.60. It is found on a hill to the south-west of the village of Tegur in small pebbles and in largo masses, both on and below the surface. The process of smelting is simple. The stone is broken into small fragments about a third of an inch cube and smelted in a furnace under the strong heat of a pair of bellows. The metal runs to the bottom while the impurities escape by a hole in the furnace. The crude metal is then removed to a refining furnace where it is made red-hot and beaten on an anvil under the blows of hammers worked by six or seven men by turn at the same time. When cold it is again heated and the process of beating is repeated three or four times. The iron is then pure and malleable enough for use. It is mostly used for making ploughs, sickles, and other field tools, and being soft is much liked by the people. The iron fetches 2d. to 3d. (13-2as.) the pound, and the return is sufficient to keep the establishment and leave a small profit. No limestone or kankar is mixed with the ore in the smelting furnace which causes considerable waste of material and labour. At Gulgi the daily outturn of iron is about forty pounds.

¹ The local building stones are, iron-stone, blue basalt, granite, slate, sandstone, quartz, and flint-stone. Iron-stone is found chiefly at Nigadi, Banadur, Mandihal, and near Dhárwár in the Dhárwár sub-division; at Kalghatgi, Hángal, and Shiggaon in Bankápur; and at Háveri and Timápur in Karajgi. It is found three to six feet under ground in slauting layers two to six inches thick. It is also found on the surface of hills where the layers are four to nine inches thick. The stone does not require blasting. The cost of working in the quarries is about Gs. (Rs. 3) the hundred cubic feet. When, as at Hángal, the stone is found in thin layers of two to four inches, the masonry resembles that of burnt bricks and is very strong. Except in Navalgund and Ron blue basalt is found in all

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Stone.

¹ From materials supplied by Mr. G. R. Tılak, Acting Executive Engineer.

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parts of the district. It is sometimes very hard and difficult to work. The only places with regular quarries of blue hasalt soft enough to be used for building are Ganjigatti and Devgiri. Including bla-ting the cost at the quarry is about 10s. (Rs. 5) the hundred cubic feet. Granite is obtained either in slabs or blocks by blasting; it is very hard to work. At Mulgand and Mundargi in Gadag it is found in slabs ten to twelve feet long and three to nine inches thick. quantities also occur in some fields at Annigeri in Navalgund. The cost is about 8s. (Rs. 4) the hundred cubic feet. Slate occurs in the bods and on the banks of streams, about six feet below the surface. The layers are generally sloping and two to six inches thick. The chief places where slate occurs are at Mandilal and Aluxvar in Dhárwár, at Háveri and Devgiri in Karajgi, and at Ránchennar. The slabs found at Almavar are of the best quality and are used for ornamental work. The cost is about 3d. (2 az.) the square fork Sandstone can be had in any quantity on the Budangudd hill and is used for the coping of drains and other purposes for which goodsized stones are wanted. In fields near Shirar and Bresipur in Karajgi sandstone is found in lumited quantities in boulders. The cost is about 10s. (Rs. 5) the hundred cubic feet. Quartz and flintstone are found in irregular shapes on hills at Nargand and Navalgand; it is used but is not a good building stone. The cost is about 6s. (Rs. 3) the hundred cubic feet. Mr. Kies notices that potstone occurs with the tale-schists in the Kappatguild hills and is used by the people in making images and cooking vessels. Here also Tipu Sultan dug (1782-1799) pits for gan flints.

Road Metal.

In making and mending roads three kinds of metal are used, iron-stone, blue basalt, and granite. The cost is about 6s. (Rs. 3) the hundred cubic feet exclusive of carriage. The cost of metal made from the hard blue basalt or vajradundi metal is about 10s. (Rs. 5) the hundred cubic feet. Small loose iron-stones are sometimes gathered from the fields on the roadside for metal and cost about 6s. (Rs. 3) the hundred cubic feet on the road.

Sand.

Sand is found in the beds of streams. It often contains small limestone or kankar pebbles which are reduced to powder in grinding. The cost of carriage in the west is very heavy. The cost of each hundred cubic feet inclusive of cleaning and carriage ranges from 8s. to £1 4s. (Rs. 4-12). Good coarse clean sand is not found in any part of the district.

Lime.

Limestone or kankar of a yellowish white is found in black soil either in the beds of streams or in fields two to ten feet below the surface. It is sometimes easily gathered on the surface of the banks of country tracks and small streams. For every hundred cubic feet the cost of gathering varies from 10s. to £1 (Rs. 2.1-40). The lime bears a proportion of two of sand to one of lime. The mortar which this limestone yields as a rule is slightly hydraulic and is excellent for all kinds of work. The fuel used in burning the lime comes from the western forests. Including fifteen miles' carriage it costs 17s. the ton (Rs. 3 the khandi of 784 lbs.). Charcoal costs 2s.

The people generally use unburnt or kacha bricks. They are moulded from mud prepared of red or brown earth or of gray earth found in old fort-walls in the black soil plain. Burnt bricks are made only at Dhárwár, Hubli, Gadag, and other large towns. The usual only at Dhárwár, Hubli, Gadag, and other large towns. (Rs. 8-10) price for bricks measuring 12" × 5½" × 2½", is 16s. to £1 (Rs. 8-10) the thousand. Table moulded bricks of a smaller size, 9½" × 4½" × 2½", the used in public buildings at Dhárwár cost £1 4s. (Rs. 12) the used in public buildings at Dhárwár cost £1 4s. (Rs. 12) the thousand. Tiles are made of the same kind of earth as bricks and thousand. These are made of the beds of some of the ponds. They also from the clay found in the beds of some of the ponds. They cost 12s. to 18s. (Rs. 6-9) the thousand. The size used is 12" × 15" by about 4" mean diameter.

Alarge portion of the district is almost treeless. In 1848, Lieutenant now Colonel W. C. Anderson, of the Revenue Survey Department, complained of the destruction of timber in the western forests of Kod. Teak and blackwood, which were protected by Government, were alone safe; the supply of matti Terminalia tomentosa, and honi or hasán Pterocarpus marsupium, was rapidly disappearing. Not a tree of more than a few inches in diameter was to be found within miles of the edge of the forest. To obtain logs about twelve feet long one foot wide and three and a half to four inches thick, which were then in great demand, the Vadars used to fell a tree a foot or thirteen inches in diameter and chip away till it was reduced to the required size. Ten or twelve logs were put on one cart drawn by two buffaloes, and when taken to Kalghatgi in the north sold for 8s. to 9s. (Rs. 4-41) the load. In the fair season strings of ten to fifty earts passed daily out of the forests. In 1857, within three miles of Discourse of Dharwar, many parts of the country were thickly covered with dense forests, the haunts of tiger, bison, and other wild animals. Now the cover is hardly enough for jackals, and some parts are under tillage. The black soil sub-divisions in the north and east have few trees of any kind and depend upon the western forests for building timber and fuel. Efforts are now being made to grow large babbul plantations, and as the babbul grows well in black soil, it is hoped that, in a few years, the north and east will produce

On the 31st of March 1883 the area of forest land was 426 square miles, of which 155½ miles were reserved and 270½ miles were protected forests. The whole area may be divided into two divisions, the moist forest in the western sub-divisions of Dhárwár, Kalghatgi, moist forest in the western sub-divisions of Dhárwár, Kalghatgi, Bankápur, and Hángal, covering 200 square miles of which 108 are reserved and ninety-two are protected; and the dry forests in the eastern and southern sub-divisions of Gadag, Karajgi, Ránebennur, and Kod, covering 224 square miles of which forty-seven are reserved and 177 are protected forests. Hubli and Navalgund are bare of trees; they have only two square miles of forest between them.

The choice and the marking of the Dhárwár forest reserves which began in 1871 is not yet (1883) completed. For the portions of the forest which are settled maps on a scale of four inches to the mile

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TILES.

FORESTS.

¹The sections on forests and trees have been compiled from materials supplied by Mr. H. Barrett, District Forest Officer.

2 Bom. Gov. Sel. Lix. 191.

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Moist Forests.

have been prepared. The boundaries of the reserves have been marked by rough stone pillars, or by cairns four and a half feet high, tapering from six feet at the base to two feet across the top.

The moist forests which lie between the Kanara border and the eastern plain include a large and valuable forest belt to the southwest, some scrub forest on low hills, and plantations near the main roads. The extreme north limit touches and is bounded by Kánara and Belgaum and the south by Maisur. The moist forests are divided into the four circles or divisions of Dharwar, Kalghatgi, Bankapur, and Hangal. Within the forest area there are four chief varieties of soil, light, red, black, and sandy. Where teak prevails the soil is light, loose, and veined with quartz. Some of the rocks are ironstone or sandstone, but most are granite. In Dhárwár, Kalghatgi, and Bankapur the forest lands are hilly and waving, but the Hangal reserves are mostly flat. The finest trees are generally found in valleys, which in some parts are thickly wooded, while the hill-tops are generally thinly covered with trees. Teak prevails throughout the whole of the Dhárwar, Kalghatgi, and Bankapur forests; towards Hangal it almost disappears. The best teak is found in Kalghatgi where in suitable places it grows extremely well and promises to reach a considerable size. As a rule tho forests do not yield large timber except in the form of poles. With this exception the reserves are fairly covered with a superior crop of trees capable of giving a large yield of building materials and firewood. Many kinds of bamboo also occur whose strength, lightness, and elasticity make them most useful and well suited to the wants of the people. Of the four circles or divisions the forests of the Dharwar sub-division, with twenty-nine square miles of reserved and twenty-one square miles of protected forests, are of great value and supply timber and firewood to the town of Dhárwar and to the treeless black-soil country to the east. The Marmagaon-Bellári railway which will pass through the heart of these forests and then run through a woodless country to Bellari, will depend on the Dharwar forests for a large part of its fuel. In this division two good roads run through the northern and southern parts of the main belt of forest, joining it with the town of Dharwar at distances of ten to fifteen miles. The Kalghatgi forest, with fifty-one square miles of reserved and twenty-nine square miles of protected forests, is the most important in the district. On its western side it is in character very like the neighbouring forests of Yellapur and Haliyal in North Kanara, and is well stocked with rich trees. A large number of the villages included in this belt of forest are entirely deserted, their sites being overgrown with trees and dense underwood. In other parts of this belt the villages are merely a few huts, in small forest clearings. At certain seasons the climate of the whole tract is unhealthy and in parts the water supply is scarce and bad. Most parts of these forests can be reached by carts, and the main road from Yellapur to Dhárwar passes through the southern portion of the forest area. two good local fund roads, one runs through the heart of the northern half, and the other through the centre of the division. From these forests the towr of Hubli is mostly supplied with fuel, and from

the case with which timber can be sent to Hubli and Dharwar, this forest will be able to supply the Marmagaon-Bellári railway with a large quantity of firewood. In the northern part of this forest belt the surface rock is very rich in iron ore, and iron is still smelted in the village of Gulgi. The forest divisions of Bankapur and Hangal are much alike. The Bankapur forests, with an area of eighteen square miles of reserved and nineteen square miles of protected forests, are stocked with useful wood, and the vigour and value of the stock will increase as the forest lands become fully guarded from fire. They are easy to work as they lie along the Kanara frontier. value is a good deal lessened by mixture with large alienated forests. The forests of Hungal include ten square miles of reserved and twenty-three square miles of protected forests. They are the fringe of the grand Kanara forests, but the growth of the timber is slower and much less vigorous as the rainfall is much lighter. Hangal forests will never produce such large timber as is grown in Kanara. They have also suffered much from careless cutting from which they are now slowly recovering. With time and care, the Hangal forests will yield much small wood fit for building nativo houses and for making field tools. They also contain some fine sandalwood. As they are crossed by good cart roads they can be easily and cheaply worked. The value of these forests is great, and will become greater as their produce will always find a ready market eastwards in the wide forestless tract of eastern Dhúrwár, the Nizam's territory, and Bellári.

The dry forests are included in the sub-division of Gadag, Kod, Ránebennur, and Karajgi. These forest lands are upwards of fifty miles east and south of the Kanara forests, and are mostly dry stony hills. In this part of the district the existing forest or woodbearing area is extremely small. At present the bulk of the reserves is in a very poor condition, have or at best with a covering of scrub and The rewooding of these hills must be slow, but there seems no reason to doubt that with care and time the attempt will succeed. The forest lands of Gadag, with forty square miles of reserved and thirty-three square miles of protected forests, are chiefly in the Kapatgudd range which has a total length of about thirty miles. A large tract in the centre of the range is alienated, and both on the north and south side several alienated villages hold large tracts of hilly country. The soil of these hills is almost everywhere scanty. Even at the base of the hills it is stony and barren. The north half of the chain has no scrub, the hills being covered with fine spear-grass. Along the banks of a few streams near Doni are some stunted date-palms and a few other trees. At the base and sides of the hills from Chik-Vuduvati to the Tungbhadra is some stunted scrub; but it gradually disappears about the middle. The tops of the hills are bare rock. Among the scrub the chief trees and bushes are bandurbi Dodonæa viscosa, which covers large tracts and is the most common shrub in the range. Next in commonness come the Acacias and Cassias: khair Acacia catechu, phuláte bábhul Acacia latronum, and bábhul Acacia arabica. With these a little teak is mixed in the plains near Chik-Vuduvati. Teak also occurs in several of the small valleys near Kulkera, the vigorous shoots seeming to show that teak was Chapter II.
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formerly common. According to the people twenty-five to thirty years ago the hills were covered with trees. The Cassias are tarnad C. auriculata, and báya C. fistula. The C. fistula is not plentiful; it is found chiefly along the banks of a few rivulets. An Albizzia and a Bignonia are also fairly common at the base of the hills to the south of the range. A few stanted nim trees Molia azadirachta also occur. Altogether the vegetation is very poor, and much care and many years will be required to rewood these hills.

The greater part of the Kod forest area, with seven square miles of reserved and thirty-four square miles of protected forests, consists of two parallel ranges of hills in the south of the sub-division. Between the two ranges lies the populous and highly tilled Masur valler. The northern or front range is a narrow strip of bare hill, whose skirts are tilled to the base. East of the point where the Masur road crosses them the hills are extremely bare. To the west of the Masur road a little scrub occurs on the slopes and along the base. The Maisur frontier which runs along the crest of the southern or rear range comes down to the plain about the centre of the line, so that only part of the northern face is in British territory. part of the area of both ranges has been assigned as free-grazing land for the neighbouring villages. As grazing ground these hills are of great importance to the people during the south-west rains and the cold weather months, that is from June to February. After March the yearly fires sweep through the whole area, and there is nothing for cattle to cat till the next south-west rains in June. The southern range is better wooded than the northern. At both ends is a considerable area of woody hill country, some of which has been set apart as reserved forests. Besides these two hill ranges, in the northern half of the sub-division two isolated patches of waste have been taken One of these is the deserted village of Bábápar which in parts is thickly covered with thorny scrub fit for fuel. The other includes portions of three villages and is well covered in parts with matti Terminalia tomentosa and other inferior wood. and conditions of this forest area are similar to those of the Kapatgudd rango in Gadag, and it is managed in much the same way. Here, as in Gadag, a certain area of valuable wood-bearing land is mixed with much waste, mostly wanted for grazing. It is hoped that in time the whole will be covered with trees. The forest land of Ranebennur includes seventy square miles of protected forests. Within the area of forest land are large tracts of unproductive waste and three blocks of naked brown hills. The Budpanhalli block to the north of Ranchennur consists mainly of low stony hills. Parts of the village lands of Budpanhalli and Nukapur are thickly covered with low thorn bushes, but much is stony and almost utterly bare. The only trees are a few scattered babbal Acacia arabica, palas Butea frondosa, and nim Melia azadirachta bushes. Medleri block, on the east side, is of irregular shape. It stretches from Ranebennur nine miles to Kudrihal, long downs bare except for scattered brushwood one or two feet high and near Airání asprinkling In the village lands of Eklaspur is about a square of small trees. mile of anjan Hardwickia binata forest. This is the only place in the district where the tree occurs. The people say the trees were 31

not planted and are increasing in number and size. At present not planted and are increasing in number and size. At present the only growth in the lauds of Hanshikati and Chalgeri are a few small low bushes called paorki, bandurbi Dodonea viscosa, and few small low bushes called paorki, bandurbi bara har hard few small low bushes called paorki. revdi. At present much of this reserve is extremely bare, but there is no reason why, as at Badpanhalli, thorny serub should not grow. The prospects of this block are better than those of some of the stonier tracts, as before the 1876 famine most of the forest land was marked into fields and was occasionally under tillage. The third or Halgeri block lies in the south-west of the sub-division. chiefly a low range of stony hills, with a little waste at the base and on the sides. The whole is almost utterly bare; only at Anhirralli and a few, other places are there small patches of babbal and other them bashes In the whole forest land of Ránebennur the only thorn bushes.

The best-covered forest lands in Karujgi are in the Katenhalli trees are in and near the village of Eklaspur. block about eight miles south of Karajgi and in the village of Gutal With these exceptions the Karajgi The small area to the north of the Varda and the detached lands in the centre of the sub-division about twelve miles to the east. varia and the detached manus in the centre of the sub-division are fairly covered with low brushwood, but the lands of Basapur, Ipikop, and Parapur have large areas of bare downs.

And Parapur have large areas of bare downs. forest lands are extremely bare. the sub-division are there trees of any size. Much of the land seems closely to resemble the anjan-growing lands of Eklaspur, but there

In cultivated lands the only trees over which Government have reserved their rights are teak, blackwood, and sandalwood. reserved blackwood and sandalwood, the only reserved trees on waste are no anjans in Karajgi. hads suitable for tillage are matter Terminalia tomentosa and honge. Pterocarpus marsupium. The people of forest villages are allowed to cut and remove grass free of charge, and also to take from the protected forest land headloads of dry firewood and thorns for field. processed sources and accomplise burning prevails in the forest lands, the fencing.

No kumri or copplice burning prevails in the forest lands, the tops and slopes of the hills being too stony and bare for this kind tops and stopes of the mins being wo swiny and three for bins kind of tillage. The chief stores for the sale of wood are at Dhárwár, of tillage. Bankápur, and Hángal, where timber can be bought at Kalghatgi.

November of the working concent which lasts from November another colors. auction sales. During the working season which lasts from November auction sales. During the working subson which has from november to June, at branch stores along the line of forests, timber is gathered to June, at branch stores along the line of forests, billion is balling and to June, at branch stores along the line of forests, billion and sold by public auction.

Most of these stores are temporary and Most of these stores are temporary and and sold by public auction. are liable to be changed yearly for more convenient sites. retail stores for the sale of wood at Dhárwár and Kalghatgi have been abolished and the timber and fuel required for the large towns are now supplied from departmental cuttings. Departmental firewood outlings were began in 1879 on the principle of coppice under standards instead of clean cuts as in Belgaum. ent away for firewood and other purposes, such growth as, owing to injuries from fire and other causes, seems unlikely to improve, to injuries from the and other causes, seems makely to improve, wood trees for standards as are likely to wood trees for standards as are likely to deaving such sound that wood trees for standards as are fixely with the departmental cuttings have been flourish for thirty years. So far the departmental cuttings have been account to the standard of the s a success, and give satisfaction to the people. the Government rate for a stack measuring 4' × 4' × 6', equal to a large carrioad of fivercood drawn by two bullcobe is only 90' (D. 1) large cartload of firewood drawn by two bullocks is only 2s. (Re. 1),

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for a beast-load $1\frac{1}{2}d$. (1 anna), and for a head-load for a man $\frac{3}{4}d$. (1 anna), for a woman $\frac{1}{4}d$. (1 anna), and for a child $\frac{1}{8}d$. ($\frac{1}{12}$ anna). The net proceeds of the yearly departmental firewood cuttings show a gradual rise from £309 (Rs. 3090) in 1880-81 to £500 (Rs. 5000) in 1881-82 and £1238 (Rs. 12,380) in 1882-83.

Before 1681 the right of grazing in forest lands was sold to contractors. Under this contract system there was no check on the number or the kind of animals admitted into the forests, and the cattle-owners could not well be held responsible for damage done by fires or by branch-lopping. Besides a fee of 6d. to 2s. (Re.\frac{1}{4}-1) a head of cattle, the contractors used to extort money from the cattle-owners and otherwise oppress them. Under the system introduced in 1881 the people are allowed to graze their cattle and flocks in certain parts of the forest lands by paying a yearly fee of 3d. (2 as.) for every head of horned cattle and of \frac{3}{4}d. (\frac{1}{4} anna) for every sheep and goat. The people greatly prefer the new system, and it has also proved a financial success. In 1881-82, under the new system, the receipts amounted to £1298 (Rs. 12,980). After deducting fifty per cent credited to land revenue the balance exceeds what was obtained under the old system.

Minor Produce.

The most important minor forest products are honey, charcoal, and bamboos. Bamboos are in great request as they have many uses. In Dhárwár a great trade is done in bamboo baskets and mats which are sent to various parts of the country. The timber trade is mostly in the hands of wealthy merchants who live in Dhárwár and Hubli. These men buy the greater part of their wood in Kánara and retail it to the people of the plain country.

The permanent residents near the forest are Muhammadans and Lingáyats, and the tribes who cut or carry timber or fuel are Bedars, Golars, Lambánis, and Vadars. The people employed in the forest are mostly taken from the resident castes, but in Kalghatgi and Bankápur about half of the day labourers are Lambánis. The daily pay of forest labourers varies according to the demand. The usual rates are $5\frac{1}{2}d$. ($3\frac{1}{2}as$.) for a man, $4\frac{1}{2}d$. (3as.) for a woman, and 3d. (2as.) for a boy or girl.

Till 1871 the Dhárwár and Belgaum forests together formed the charge of one European forest officer. In 1871 the Dhárwár forests were separated and a district officer with protective staff was appointed. At present (1883) under the European forest officer, who receives a monthly pay of £90 (Rs. 900), is a permanent establishment of five foresters and two clerks whose monthly pay varies from £2 to £3 (Rs. 20-30); twenty forest guards on a monthly pay varying from 14s. to £14s. (Rs.7-12); and two peons on a monthly pay of £1 12s. (Rs. 16). Including pay and travelling allowances, the whole fixed establishment costs £1731 (Rs. 17,310) a year. In addition to the fixed establishment temporary forest guards and foresters are employed. During the year ending March 1883 the establishment, both permanent and temporary, cost £2254 (Rs. 22,540). Of the permanent staff one forester and seven forest guards are for the Dharwar sub-division, two foresters and seven forest guards are for Kalghatgi, and one forester and three forest guards each for Bankápur and Hángal. Of the temporary staff there are one forester and six forest guards each for Gadag, Ránebennur and Karajgi, and Kod. Each sub-division is divided into two beats under the head forest guard. The duties of the guards are to patrol the forests within an average beat of twenty-six square miles, to protect the reserves from damage, and to watch the removal of bamboos and firewood from the forests. Each forester in charge of a division visits the forests from time to time and sees that the men under him do not shirk their work.

During the eighteen years ending 1883 forest receipts have risen from £1710 (Rs. 17,100) in 1865-66 to £8291 (Rs. 82,910) in 1882-83. Except during the 1876 and 1877 famine, when the receipts fell to £1707 (Rs. 17,070), this increase has been gradual. On account of the reorganization of the establishment charges have risen from £704 (Rs. 7040) in 1865-66 to £4195 (Rs. 41,950) in 1882-83. During the last three years the net revenue has averaged £2511 14s. (Rs. 25,117) a year:

DHARWAR FOREST REVENUE, 1866-1888.

Year.	Receipts.	Charges.	Surplus.	YEAR.		Receipts.	Churges	Surplus
1865-00 1866-07 1867-03 1868-89 1869-70 1870-71 1871-72 1872-73	\$023 8270 2288 4603 5348 4966 5857	£. 704 1272 1979 1639 2354 8993 8790 4521 3373	£. 1006 1750 1300 650 1809 1855 1070 1855	1874-76 1875-76 1870-77 1877-78 1878-70 1870-80 18*0 81 1861-82 1882-83		£. 5484 4299 8103 1707 2529 4608 4440 5880 8201	£ 3154 9279 2067 2023 3004 3721 3200 4195	£. 2068 1145 823 506 1604 719 2720 4096

The most useful trees and plants are: Alale (K.) hirda (M.), Terminalia chebula, yields a yellowish hard and heavy wood used for field tools but not valued as it is apt to suffer from the attacks of white ants. The bark and berries are useful in tanning and in medicine; they also make excellent black ink and a black dye. Attirumdi (K.) or umbar (M.), Ficus glomerata, yields a wood which is often used in the body of carts, into which the iron axle fits. The fruit like the common fig is eaten by the poorer classes and by cattle. Banne (K.) apta (M.), Banhinia racemosa, has a very strong and hard heartwood; the bark is used for making rope and its gum as a medicine. Belpatri (K. and M.) Ægle marmelos, is sacred to Shiv; the timber is not used; the inside of the fruit is scooped outand made into spuffboxes, Bilenandi (K.) nána (M.), Lagerstræmia macrocarpa, has a light serviceable wood which is used for building though it is apt to suffer from white ants. Bite (K.) sizu (M.), Dalbergia latifolia, the blackwood, yields a valuable strong tough wood which is much used in cabinet-work and for other purposes. Burla (K.) shevri (M.), Bombax malabaricum, the silk-cotton tree, though worthless as timber is used by wood-carvers or Jingars in making scabbards and toys; its cotton is valued for stuffing quilts and pillows. Dindal (K.) dhávda(M.), Conocarpus latifolia, has a white and very hard wood used in building and for cart-axles and ploughs and any tool for which strength is required; it also yields a good gum. Dikámali (M), Gardenia lucida, has close-grained wood good for making

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combs; it yields an ill-smelling gum resin which is much used in healing wounds and sores. Gandha (K.) chandan (M.), Santalum album, furnishes the well-known sandalwood of commerce; it is used for carving incense and perfume and in making sect brow-marks; from the root a valuable oil is prepared. Kera mara (K.) hibra (M.) Semecarpus anacardium, the marking-nut tree is useless as timber, the oil of the nut is used as a blister and fomenter in rhoumatism and in making ink. Halasu (K.) phanas (M.), Artocarpus integrifolia, the jack-tree, is used in carpentry and furniture. Ilaldiadvibhende(K.) Erinocarpus nimmonii, has a very soft wood and fibrous bark which is twisted into rope. Hunab (K.) kindal (M.), Torminalia paniculats, is like matti Terminalia tomentosa; it is used almost as much as matti but is not nearly so good or lasting being very liable to attacks from insects; it is generally soaked in water for three or four months before being used. Hunase (K.) chinch (M.), Tamarindus indica, the tamarind, has a very hard and lasting heartwood, which is used for sugar and oil mills and for mallets and rice-pounders. Jzale-gida(K.) babkul (M.), Acacia arabica, is used for ploughs, carts, and sugarcane mills and in other work in which great strength is required; the bark is useful in tanning. Kakkai (K.) baya (M.), Cassia fistula. is notable for its long pods and beautiful hanging clusters of primrose yellow flowers; the bean is a medicine and an article of commerce. Karegida (K.) gehela (M.), Randia dumetorum, is a small shrub with close-grained wood used for walking sticks; the fruit is a fish-poison. Karemuttal (K.) tivas (M.), Dalbergia oojeinensis, has very valuable hard wood of great strength and toughness used for carts, ploughs, and carriage poles. Matti (K.) ain (M.), Terminalia tomentosa, yields a much valued and generally used hard brown-black timber; the bark is valued in tanning. Murgala (K.) bhirand (M.), Garcinia purpurca, the wild mangosteen, whose fruit by boiling yields the concrete oil known as kokam, is used in baking cakes and heals chaps, sores, and wounds. Muttala (K.) palas (M.), Buten frondosa, yields strong fibrous wood which is not used locally for building; the leaves are used by Brahmans and others as plates. Raktahoni (K.) asan (M.), Pterocarpus marsupium, yields a good strong reddish brown timber suited for furniture and house-building; it is also much used for ploughs, harrows, and carts. A red kind like resin oozes from the tree. Shendhi (M.), Phœnix sylvestris, the wild datepalm, yields palm beer and spirit; from its leaves mats and baskets are made. Shivani (K.) shivan (M.), Gmelina arborca, yields a good timber used in building and for field purposes; it stands weather and water. Shiris (K.), Albizzia odoratissima, furnishes a very strong lard wood which is used for the rollers and crushers in sugarcane mills, and in cart-making; it is a useful roadside tree growing fast and giving good shade. Tadsal (K.) dháman (M.), Grewia tiliæfolia, has a white and pliant wood that would make good bows, arrows, and lances; its only local use is for axe-handles: the small clongated red berry is eaten by the people. Tegina (K.) ság (M.), Tectona grandis, teak, yields the well-known very durable timber.

Roadside Trees. The shade trees that thrive best along roadsides are the karanj Pongamia glabra, shiris Albizzia odoratissima, nim Melia azadirachta, mango Mangifera indica, ápta Bauhinia racemosa, Millingtonia hortensis, Ficus cordifolia, Ficus nandrook, and others of the fig species. On the roads which cross the black-soil and plain country to the east of Dhárwár, the bábhul Acacia arabica has been found most suitable. Pithecolobium saman or rain-tree, a native of Jamaica, only lately introduced into Dhárwár, grows so readily, wants so little water, and gives such excellent shade, that it is certain to become a favourite roadside tree.

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The chief trees found in fields and gardens and grown for their fruit are anjura Ficus carica the fig, bâle Musa sapientum the plantain, begpura Citrus indica the citron, bor Zizyphus jujuba the jujube, geru mavu Anacardium occidentale the cashewnut, halasu Artocarpus integrifolia the jack, hunase Tamarindus indicus the tamarind; jambu Syzygium jambolanum the jambool, mavu Mangifera indica the mango, nimbu Citrus bergamia the lime, pyara Psidium pomiferum the guava, rámphal Annona reticulata the sweet sop, sitáphal Anona squamosa the custard-apple, and tengu Cocus nucifera the cocoa-palm. These are all grown largely and much used.

Field Trees.

The chief fibre-yielding trees and plants are ambada Hibiscus cannabinus hemp, ananas Ananassa sativa pine-apple, bambugala Bambusa arundinacea bamboo, bále Musa sapientum the plantain, bhát Oryza sativa rice, bhendi Abelmoschus esculentus, jangli rui Abroma augustum devil's cotton, kabbu Saccharum officinarum sugarcane, kalnar Aloe vulgaris aloe, kanghi Abutilon indicum country mallow, madi Caryota urens bastard sago-palm, musk bhendi Abelmoschus moschatus the musk mallow, náriel Cocos nucifera cocoa-palm, supári Areca catechu betel-palm, támbda ambáda Hibiscus sabdariffa roselle.

Fibre Plants.

The hedge plants are adsal Adhatoda vasica, daba-galli Opuntia dilleni prickly-pear, dunda-galli Euphorbia antiquorum triangular surge, hala-galli Euphorbia tirucalli milk-bush, jzale-gida Acacia arabica, kadandla Jatropha curcas physic-nut, kalnar Aloe vulgaris aloe, lekkigide Vitex trifolia Indian privet, mada rargi Lawsonia alba henna plant, nuggi mara Moringa pterygosperma horse-radish tree, pángara Erythrina indica coral tree, sikekai Acacia concinna soapnut, yele-kalli Euphorbia nerrifolia candlecactus.

Heilge Plante

The chief water plants some of which have magnificent blossoms are of lotuses or kamals the Nymphæa stellata with rose-coloured scentless flowers, Nymphæa rubra with large brilliant red flowers, Nymphæa pulescens with white flowers, and the water-bean Nelumbium speciosum. All of these are common near Dhárwár.

Water Plants.

The chief climbing shrubs, plants, and weeds growing on waste lands and hills are dhaturi Datura alba the thorn-apple, tottal balli and Caparis horrida a thorny shrub with large white flowers. There are three kinds of dhaturi plant, kakigida Solanum indicum Indian nightshade, Solanum jacquini, and Solanum trilobatum. Other plants are the utrani Achyranthes aspera, and the yellow thistle or Mexican poppy Argomone mexicana.

Weeds.

Among the wild climbing plants in the forests and hedges are

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GRASSES.

The most useful grasses for fodder, volatile oils, and thatching are mailifully and geddali gen hully varieties of Audropogon, and chapparigen hully, heratifully, marahartifully, and ubina hully, all considered good fodder and apparently belonging to the Graminacero family. Haridi Cynodon dactylon is one of the best fodder grasses especially for horses. The Andropogon martini has a very strong aromatic and pungent taste, and cattle are voraciously fond of it. The align ghas Andropogon citratum or lemon grass, the balada bern Andropogon muricatum Cuseus grass, and the darble Cyperus rotundus are fragrant grasses from which oil is made.

FERNS.

Except those which have been introduced into gardens few varieties of ferns are found in Dhárwár. The only local ferns noticed in the forest are the common Pteris, two varieties of maiden hair or Adiantum, and Ligodium scandens a climbing fern with graceful drooping filigree-like fronds. None of the lovely mosses and lichens which adorn the Kánara forests are found in the comparatively dry forests of Dhárwár.

LXOTICS.

The chief exotic trees and plants which have been introduced into Dhárwár are the rain tree Pithecolobium saman a native of Jamaica, the logwood tree divi-divi Cæsalpinia coriaria which grows in black and red soil and the pod of which yields valuable tanning, the Australian acacias, the mahogany tree Swietenia mahogani, the Casuarina equisetifolia, the American Bastard cedar Guazuma tomentosa, the Millingtonia hortensis, and the Eucalyptus obliqua. Some Encalyptus trees planted a few years ago in damp lowlying ground are thriving. Two trees eight inches in diameter at the base and more than thirty feet high will probably grow to a large size.

Many exotic plants flowers and vegetables are grown in the gardens about Dhárwár. In the garden attached to the Nawáb of Sávanur's residence a few apple and pear trees have been planted, and the apple trees bear fruit. Strawberries are also grown, and with care and rich soil would yield well. The Cape gooseberry thrives and bears quantities of fruit from which one of the best Indian preserves is made. Pine-apples succeed well and of late years have been grown equal in flavour and size to fine English hothouse pine-apples. The plants require great care and very rich manure. The following ornamental shrubs and plants thrive well: Acalyphas, Achimenes, Aralias, Arums, Begonias, Bignonias, Caladiums, Coleus, Crotons, Dahlias, Dracconas, Gardenias, Gladiolus, Hoyas, Iris, Ivy, Jasminum, Panax, and Plumbago. With care nearly all English flower and vegetable seeds grow well in Dhárwár. The chief varieties of flowers are the Amaranthus, Antirrhinum, Aster, Balsam, Calliopsis, Candy tuft, Cockscomb, Convolvulus, Dianthus or Pink, Geranium, Heliotrope, Hollyhock,

Marigold, Mignonette, Portulaca, Rose, Sweet Pen, Sunflower, and Verbena. The chief vegetables are Artichoke, Beetroot, Cabbage, Capsicum, Carrots, Cauliflower, Celery, Cress, Cucumber, French Beans, Knolkhol, Lettuce, Marrow, Mustard, Onions, Parsley, Peas, Radish, Spinnach, Tomato, and Turnip.

Chapter II. Production.

Dhárwár is not a cattle-breeding country. No one wanting a good pair of bullocks or a good buffalo would buy an animal of the Dhárwár breed. The local breed is decidedly poor. The demand for good cattle is supplied from Sholápur, Pandharpur, Maisur, and Bellári. The chief cattle-marts are Dhárwár, Hubli, Navalgund, Kalghatgi, and Alur in Hángal. The cattle-breeders are Dávri Gosávis, Dhangars, Gaulis, Airgaulis, and Lambánis. Formerly the abundance of cheap grazing encouraged the people to keep a number of miserable beasts which could never do a day's work. The average animal has of late somewhat improved in quality and as it now costs

Domestic Animals,

money to feed cattle none are kept which cannot earn their keep. The chief domestic animals are oxen, cows, buffaloes, sheep, goats, horses, and asses. Of oxen the 1882-83 returns show a total of 258,510 head. These are principally of three kinds: hoslál or from the river country that is the banks of the Krishna, mudlia or from the south-east that is from Maisur and Madras, and joári or local. Of these the finest are the large white Maisur bullocks which cost £10 to £30 (Rs. 100-300) or even more; the holsál or Krishna bullocks cost £5 to £10 (Rs. 50-100); and the local bullocks, which are smaller, cost £3 to £6 (Rs. 30-60). All three kinds are used for ploughing, for riding, and for drawing carts, but the Maisur bullocks are said to be best suited for carts. The larger bullocks last about sixteen or even twenty years and the smaller about twelve years. Of cows the total is returned at 151,379 and of buffaloes at 123,975, of which 83,452 were she-buffaloes. The best buffaloes come from the black-soil country in Navalgund, Ron, and Gadag on the east and A cow costs 16s. to £3 (Rs. 8-30) and a she-buffalo £3 to £6 (Rs. 30-60). Sheep and goats, returned at 231,125, are kept chiefly by the Kurubars or shepherds in flocks of 100 to 1000. They are not reared for export but entirely for local use, and the numbers are not They are found chiefly in the centre and east of the very large. district. They feed on the small grass that grows on the banks of the streams and in waste numbers, on tree and shrub leaves, and on the leaves of the cotton plant after the cotton crop is picked. The price of sheep is said to vary from 2s. to 8s. (Rs. 1-4), and of goats from 4s. to 8s. (Rs.2-4). Horses are returned at 5478. They are generally owned by Bráhman village accountants and some of the former district revenue officers. Dharwar was once famous for its breed of ponies running up to fourteen hands high; they are not now so good as they were. The breed is small under thirteen hands, and often ill-shaped and vicious but hardy. The Persian and

¹ During the American War (1864-1866) when there was a glut of money extravagant prices were paid for cattle at the Hubli market. For a pair of bullocks Rs. 300-400 was a common price and Rs. 1200 were paid for a bullock which distinguished himself by uprooting a large stone buried in the ground which no other beast could move. Bom. Gov. Sel. CLXVIII. 104.

Production.
WILD ANIMALS.
Large Game.

Mulgand, and the hills in the south of Kod. It also occasionally turns up most unexpectedly near villages in the middle of the plains where it generally takes refuge in old temples and is easily disposed of. The Hunting Leopard, chita or chircha, Felis jubata, is common in the Kod and Gadag hill ranges. Some years ago when the Dharwar plains abounded with black antelope, hunting chitás were kept by the Nawab of Savanur and the chief of Mudhol. The Indian Black Bear, ar or karadi, Ursus labiatus, is fast disappearing. They are now occasionally met in the Kalghatgi, Bankapur, and Hangal forests, and in the hills to the south of Kod. Formerly they used to inhabit the Dambal hills, but, as their haunts were easy of access, the bears have all been shot within the past few years. The Bison, advikona, Gavous gaurus, may be found in the Hulginkop, Sangntikop, and Badnigatti forests, which they frequent in June soon after the beginning of the south-west rains, when the young grass is a few inches high. Wild cattle, by all accounts the descendants of the same breed, are found in wide grassy and scrubcovered plains in Savanur. These Savanur cattle greatly resemble tame cattle except that their movements are more active and deerlike. They are very difficult of approach and the print of the hoof is longer and much more sharply cut than the print of tame cattle, much resembling the track of the bison, though smaller. The whole number of these wild cattle does not exceed forty or fifty head. The Striped Hymna, kati girab, Hymna striata, is not common. They are occasionally seen in the west and a few have taken their abode in the Nargund hill, and no doubt may be found in the Dambal hills, the Budangudd hill, and in Kod. The Indian Wolf, tola, Canis pallipes, though now scarce, occurs in Kalghatgi, Kod, Karajgi, Rancbonnur, the Itigatti forests near Dharwar, and in the Dambal Wolves are generally seen in parties of two or three. A few years ago a wolf entered the enclosure of the house belonging to the Gorman Mission at Dhárwár and attacked and mauled a man. The Jackal, kunni nari or kappal nari, Canis aureus, and the Indian Fox, chendkinnari or sanna kempu nari, Vulpes bengalensis, are common throughout the district. The Wild Dog, kadu nái, or chirnái, Cuon rutilans, is found in the Kánara forests and doubtless occasionally passes within Dhárwár limits. They go in packs and kill large numbers of deer and wild pig. Even the tiger is said to fear the wild dog and to leave a part of the forest in which a pack of wild dogs have taken up their quarters. They are in appearance like a large pariah dog having coarse reddish hair; the tail is bushy and almost all black. The Wild Boar, kadu handi also called mikka, Sus indicus, is found in all the western forests and in the Dharwar. Nargund, and Shrimantgad hills. Immense boars are often found in the forests which would delight the hog-hunter in anything like a riding country. In Bankapur and from Lakshmeshvar and Shirhatti, west of the Kappatgudd, the country is perfectly rideable and firstrate sport may be got in the cold weather. Hog may also be ridden in parts of Kod.

Of the Deer tribe, the Indian Stag, kadavi, Rusa aristotelis, is scarce, occasionally coming across the border from Kánara into the Sangtikop and Hulginkop forests of Kalghatgi. The Spotted Deer,

Chapter II.
Production.
WILD ANIMALS.
Deer.

sárga, Axis maculatus, is found especially during the rains in the forests of Kalghatgi, Bankapur, and Hangal. The Ribfaced or Barking or Muntjac Deer, advikuri, Cervulus aureus, is very scarco. The Black Buck or Antelope, chiggari, Antelope bezoartica, at one time found in great numbers from one end to the other of the plains. is growing scarce. A solitary herd of eight or nine is now and then met in the black soil plains in Nargund and Hubli, a larger number are found in Ranebennur, Karajgi, Kod, and Gadag, and a few in Hangal, Bankapur, and Kalghatgi. The longest horns come from the Dambal hills. The Ravine Deer or Indian Gazelle, budri or mudari. Gazella bennettii, is far from common; a few are found in the Dambal hills and in parts of Savanur, Karajgi, and Kod. In the Kod and Gadag hills herds of seven and eight have been seen, but they are shy and difficult to get at if they once see the sportsman. The Four-horned Antelope, kondguri or gondkuri or kanu kuri, Tetraceros quadricornis, is found in all the forests of the sub-divisions bordering on Kanara where they are numerous. A few are also found in the Dhumvar hills. The Mouse Deer, pivai, Memimna indica, is found in the forests south of Kalghatgi and may occasionally be met in the west of Bankapur and Hangal. It is far from common.

Small Game.

Of small game, the common Wild Cat, kåd beku, Felis chaus, is found everywhere. A larger and spotted variety is also occasionally met. The Tree Cat, manori or manibekku, Paradoxurus musanga, which prowls at night, seems very fond of fruit trees. It is common in Dhárwár itself, and often takes up its abode in the roofs of houses. The River Otter, niru nai, Lutra nair, is found in most large rivers and streams. It is also occasionally met in some of the large ponds throughout the district. The Porcupine, yedi, Hystrix leucura, and the Hare, mala, Lepus nigricollis, are very common in the hilly and forest parts. The Malabár Squirrel, commonly known as the Red Squirrel, kyásalali, Sciurus elphinstonei, is found in all the forests bordering on Kánara. The common Squirrel, aluli or analu, Sciurus palmarum, is met everywhere.

BIRDS.

Of Game Bieds, the common Sand Grouse, Pterocles exustus, is common in the redsoil sub-divisions. The Painted Sand Grouse, Pterocles fasciatus, is rare. The Peacock, naul, Pavo cristatus, is found in all the forests bordering on Kánara and in most large gardens in Hángal, Kod, and along the banks of the Tungbhadra and Varda. The Gray Jungle Fowl, kádu koli or advi koli, Gallus sonneratii, and the Red Spur Fowl, Galloperdix spadiceus, are found in all the western forests. Two kinds of Partridge or kaujga, the Painted hunju Francolinus pictus, and the Gray kauljal-hakki Ortygornis ponticerianns, occur in the district, the painted plentifully on the water-shed and to the west of it and the gray only to the east. Of Pigeons, the Southern Green Pigeon, hasarpárivála, Grocopus chlorigaster, is found in the western sub-divisions and occasionally in the plains. The Malabár or Gray-fronted Green Pigeon, Osmotreron malabarica, is found only in the thick forests on the

¹ Contributed by Lieutenant L. L. Fenton, Assistant Survey Superintendent.

borders of Kánara. The Blue Rock Pigeon, párivála, Columba intermedia, occurs in the plains and is very fond of old temples and wells.

Chapter II.
Production.
Burds.

Seven kinds of Quail or burl are found in the district, the Jungle Bush Perdicula asiatica, the Rock Bush Perdicula argondah, the large Gray Coturnix communis, the Blackbreasted or Rain Coturnix coromandelica, the Blackbreasted Bustard Turnix taigoor, the Button Turnix joudera, and the small Button Quail Turnix dussumieri. The gray quail is far from common. Quail-shooting is very uncertain, in some years it is good, in others bad.

The Indian Bustard, yeriladdu, Eupodotis edwardsi, is found in the black-soil tracts and also in Karajgi and Ránebennur, but not in large numbers. The Lesser Florikin, kannavilu, Sypheotides aurita, though scattered throughout the district, is nover found anywhere in large numbers. The Golden Plover, Charadrius fulvus, is only a cold-weather visitor. The Demoiselle Crane, korakanche, Anthropoides virgo, also a cold-weather visitor, is found mostly near the Tungbhadra. Occasionally a few may also be seen on the borders of the large ponds that are scattered over the district. The Curlew Numenius lineatus is also found.

The best Snipe or ullangi shooting is to be had in the Dhárwár, Kalghatgi, Bankápur, Hángal, and Kod sub-divisions. The best shooting season is the beginning of the cold weather just before the rice is cut, when some good sport may generally be had in fields below and watered by a pond. The varieties met with are, the Pintailed Gallinago sthenura, the Common Gallinago colestis, and the Painted Rhynchoa bengalensis. The Spotted Rail, Porzana maruetta, is often put up in rice fields while beating for snipe. The other water birds are the small Godwit, Limosa ægocephala, met in some large ponds in Hángal, and the Blackbacked Goose, Sarcidiornis melanonotus, which is found in Hángal, Bankápur Kalghatgi, and probably in Kod, but it is scarce.

Of Ducks there are the Ruddy Shieldrake, jaddu vakki, Casarca rutila; the Shoveller, Spatula clypeata; the Spotted Billed Duck, Anas pœcilorhyncha, which is very common and breeds in the district; the Whitebodied Goose or Cotton Teal, Nettapus coromandelianus, found in all the western sub-divisions; tho Whistling Teal, Dendrocygna javanica; the Gadwall, Chaulelasmus streperus, which is scarce; the Pintail Duck, Dafila acuta, found in Kalghatgi and probably in Kod and Hángal; the common Teal, Querquedula crecca; the Bluewinged Teal, Querquedula circia, which is the first to arrive and the last to leave the district; the Golden Eye or Tufted Duck, Fuligula cristata, which is scarce; and the Widgeon, Mareca penelope. The best duck-shooting is in the Kalghatgi and Kod sub-divisions where there are many ponds. But duck-shooting in Dhárwár is poor sport as the ducks are far from numerous and as soon as a shot has been fired they either take to the middle of the lake or fly to some other piece of water.

The Cochineal insect, kirionanchi, Coccus cacti, has been successfully reared in some parts of the Dhárwár tableland on the

INSECTS.

Chapter II. Production.

INSECTS.

common cactus or prickly-pear. In rearing cochineal insects branches laden with young insects ought to be put on new cactus hedges immediately after the close of the rainy season. In six months they will have increased so much that they may begin to be gathered and a year more will pass before the whole plants are consumed, In the course of the year whenever a leaf is fully loaded, it ought to be cut, and the insects scraped from it with a small stick and gathered in a basket, and killed by pouring boiling water over them. They are then well shaken in the basket to remove the hair with which they are covered and dried for two days in the sna when they are fit for sale. In 1855, under some special conditions the cochineal insect spread so rapidly as to consume all the cactas hedges near Annigeri, Gadag, and some other towns and villages in Navalgund and Gadag. The people not knowing that it was the cochineal insect thought their cactus hedges were dying from some disease.1

Silkworms

Silkworms or reshmehulla, till stopped under Government orders, were successfully raised in the Ilharwar jail. Details of the experiments are given under Agriculture. Bees gather honey from the blossoms or flowers of the many kinds of timber trees, but as there are very few trees the quantity of honey is small. In 1881-82 the revenue from honey amounted to £23 (Rs. 230).

SNAKES.

The chief kinds of snakes which in the opinion of the people are poisonous are the Cobra, nagarhavu, Naja tripudians; kiarihavu the harmless dháman or Indian Kat Snako Ptyas mucosus; balivadakhára, literally the Broken Bangle Snake, probably the Chain Viper or necklace snake, Cobra manilla; chinagihavu, literally the jumping snake, probably the Tree Snake Dipsas trigonata or Dipsas gokool; urimamdalahávu, literally fire snake from the burning pain produced by its bite, mandala is probably the same as mandal the Decean name for the Sand Snake or dutonde Eryx johnii; netragodekt havn, the phursa Echis carinata, the part of the body bitten by it oozing out blood or netra after sixteen days followed by death; bilahavu, literally the Bow Snake, possibly the name is analogous to the fabulous hoop snake of Europeans in India; manerahavu, probably the same as Manyar a term applied in the Maratha country to numerous harmless snakes but which are commonly believed to cause death by a touch of the tongue, or by casting their shadows over their victims; and nirahavu, the chequered Water Snake Tripidonatus quincunciatus.² During the eight years ending 1882 the number of snakes killed is returned at ninety-five and the number of persons killed from snake-bite at 144.

Fish.

The rivers streams and lakes are fairly stocked with fish.3 In Navalgund and Ron the chief source of the fish-supply is in the Malprabha, which skirts the north of these sub-divisions. In Dharwar fish are taken in some of the large lakes which hold water all the year round, and in a few the fish are large and plentiful. In Hubli

¹ Kies' Southern Marátha Country, 109.

² Mr. G.W. Vi

⁴ Mr. J Elphinston, C.S. and Mr. F. L. Charles, C.S. Mr. G.W. Vidal, C. S.

there are no streams but some of the large lakes are well stocked. In Gadag fish are obtained from the Tungbhadra and also from some of the large lakes. In Kalghatgi they are found in one or two FIBIL. some or one makes makes. In manganese, oney may are round in one or owe small streams and also in the Devikop, Badguigatti, Tambur, and other large lakes, which always contain a large supply of fish. In Bankapur numerous lakes contain fish, but only in the largest which holds water throughout the year are large fish found. In Karajgi, the Varda and the Tungbhadra and a few of the lakes are well stocked with fish. In Hingal, the Varda and numerous lakes contain fish. In Kod and Ranchennur, besides in the lakes, there is a large quantity of fish in the Tungbladra, which skirts their southern and eastern boundaries. In addition to the fresh-water fish, the markets in the west and south and in Dambal are well supplied with dried sea-fish from Goa, Kumta, and Bellári. The only private right of fishing is in the Bankapur sub-division at Nagnur, which in 1882 was declared by the Collector to belong exclusively to the hereditary headman Husan Aga. In Karajgi, the fisheries in some of the lakes and in the Tungbhadra river used to be sold by Government auction, but of late this practice has ceased. is believed that about 20,000 people are to some extent employed The chief fishing classes are Musalmans and Ambigers or Kabers, a class of Hindu ferrymen. Besides the Ambigers many castes catch fish in addition to their usual employment. In the larger rivers, the Varda and the Tungbhadra, in catching fish. fishing goes on throughout the year, except when the rivers are in flood. In the smaller rivers which soon dry fishing is carried on only during the rains. Fishing is also continued all the year round in the large lakes that do not run dry, though these are rare in the black-soil sub-divisions of Dharwar, Navalgund, Ron, and Gadag. The red-soil tracts with their more certain rainfall are better supplied with fish. Besides by the rod and hook or gana, and by netting, fish are caught by damming streams, by stupefying them with the juice of the milk-bush or the powdered mungarikai nut, and by basket-traps called kunts. The nets used are of two kinds, drag-nets called tataballi and khadelballi, and casting-nets called bisballi and topatti. The bisballi is a small meshed circular net about six feet in diameter, having lead weights round the edge and a rope tied to the centre. The rope is fastened to one arm of the fisher, who gathers the net in his hand and along his arm as far as his elbow, and with a circular sweep throws it clear of his arm so that it falls in a broad circle on the water, some feet from the fisher. He lots it gradually sink where it falls and then slowly pulls it towards him by the rope attached to the centre. This causes the lead weights to contract the circle, till, on pulling the net ashore, all the lead weights have come close to each other in one heap entirely closing the mouth of the net. This net is chiefly used in shallow water from one to four feet deep and the fish caught are usually small from a lew medies to a foot in length. The topatti is triangular in form with very minute The minimum size of the mesh is so small, le to 15 of an inch between the knots, that the timest fry cannot escape. The rod or gana is of two kinds, vant gana, a pole to which a line having a hook and bait is hung, and davani gana two poles fixed in the

Chapter II. Production. Chapter II. Production. water at some distance apart with a line of hooks drawn between them. Long nets and cast nets are need in the river. In the lakes, heeld a nets, night lines are laid down and examined by the fisher-cory morning. In some cases the pends are drained dry or nearly dry and everything that can be caught is taken, those suds of fish, as one and a half inch long, being caught in nets or by the hoad.

The chief kinds of fish found in p ands wells and river, me, the ahri, a large cel-like river fish. The sticky substance on the out is of its body is caten as a tonic. The andhi receis or blind fish is a river fish which is end to grow to 120 pounds weight (3 1939). Its flesh is eaten only by Mhars and Mange me even when fr 's it is said to be full of maggots. It is so easily cought, as its ruthe blind fish shows, that of his years it he become somewhat uncommon. The lain or cel is well known and is said to grow to as much as six feet long. The birth or parary is a fish that growt three or to three and three-quarters feet long. The chade is her? in rivers. It is two and a quarter feet long and is raid to be excellent eating, except that a prick from one of its bone epicks like a scorpion's sting. The dak, which is found in pends well and rivers, is considered delicious enting, but never grows to more than a foot or lifteen inches long. The glagen is a river fish which is said to vary from nine to eleven inche in length and to be nearly round. The gojal is a tasteless fish which grows about eighteen inches long. The gajra varies in length from nine to closen inches. The hargi is much esteemed by epicares. It is found in pondenul rivers and grows to eighten inches long and two rers in weight. The jham, a river fish, is said to grow to forty pounds weight. The kharali or khardi is full of hones, but especially the head is said to be good eating. It varies in length from nine inches to three feet. The kuch, a rather flavourless fish, varies in length from a first to a foot and a half. The kolar is a small flavourless fish of about nine inches long. The Longgai is said to be short and about as broad as the palm of the hand. It is believed to be the same st the ghagra. The katarna is a small little esteemed fish which grows about nine inches long. The marab or red mullet is a well known palatable fish, which lives in ponds and grows about three feet long. The muchila is also esteemed by epicures. found in ponds and rivers and varies in length from about ning inches to three feet. The murangi or merangi, a small fish found in pends and wells, is about two inches and a half long. It is much caten by the people. The murgode munia, a small fish six and threequarters to nine inches long, is found in ponds and wells and is not much esteemed. The phatar chatu, a small fish nine inches long, is found in rivers and takes it name from hovering about stones and rocks. The ruhu is a river fish which is said to grow to forty pounds weight. The rapchal is a small silver-coloured fish, nine inches long. The sursal is a small fish nine inches long. The zinga or jhinga is a small fish not much esteemed, which is found in pouds and wells. It varies in length from nine to twelve inches.

DISTRICTS.

Chapter III.
Population.
Census Defails.
Age.

DHARWAR POPULATION BY AGE, 1881-continued.

	Pa'rsis.						Отнева.				Total,			
Age in Years.	Males.	Percentago on Males.	Females.	Percentage on Females	Males.	Percentage on Males.	remales.	Percentage on Females.	Males.	Percentuge on Majes.	remales.	Percentage on Females		
Up to 1 1 to 4 5 to 9 10 to 14 15 to 10 20 to 24 25 to 20 30 to 34 35 to 39 40 to 40 50 to 54 55 to 50 Above 60	101 141141 ::	5-00 30 00 5 00 5 00 20 00 5-00 20 00 5-00 20 00	"1 "4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 09 86 36 9 09 9 09 9 09 9 09 9 09	1 114 528	5 88 5 88 5 548 23 52 20 11 11:70 17 64	1	16'06 60 CG	12,610 81,077 59,270 06,308 36,848 40,020 43,501 11,49,2 26,214 41,883 18,80° 7058 15,714	7-18 18 41 15-00 8-33 9-06 9-84 9-38 5-93 9-47 1-72 3-55	12,050 82,255 52,064 57,372 84,074 44,011 49,118 41,378 40,001 21,778 40,001 21,731 8132	7 31 19 60 18 01 7 72 10 18 9 78 9 78 8 23 5 21 9 07 4 94 1 91 4 91		
Total		20		ĭi		17		ð	449	2,035	440	,872		

Marriage.

The following table shows the proportion of the people of the district who are unmarried, married, and widowed:

DHARWAR MARRIAGE DETAILS, 1881.

		HINDUS.										
	Under	Ten.	Ten Four		Nineteen. To		Twenty to Twenty-nine		Thirty and Over.		Total.	
	Males.	Te- males.	Males,	Fo- males	Males. Fe- Ma		Males.	Te- males	Mules.	Fe- males	Males.	Fe- males
Unmarried Married Widowed .	89,061 1819 143	10,237	7553	26,016	11,637	25,366	17,968 51,960 8893	62,515	103177	6020 60,149 72,369	178,346	184,313
						Musa	LM A'N	8.				
Unmarried . Married . Widowed .	12,085 122 6	12,148 469 41	437	4609 1621 115	3227 713 66	623 2723 178	3744 5371 410	346 8600 1244	1037 13,706 2319	245 7880 9189	27,417 20,749 2833	17,968 21,293 10,762
}						CHI	ISTIAI	NB.				
Unmarried Married Widowed .	1	314 5 	172 6 	144 26 9	72 6	40 53 4	100 125 0	23 165 17	35 331 46	15 170 177	678 469 55	536 419 200

 $oldsymbol{L}$ anguage.

Of 882,907, the total population, 715,273 (357,537 males, 357,736 females) or 81.01 per cent spoke Kánarese. Of the remaining 167,634 persons, 92,371 or 10.46 per cent spoke Hindustáni; 49,020 or 5.55 per cent spoke Maráthi; 21,135 or 2.39 per cent spoke Telugu; 3415 or 0.38 per cent spoke Hindi; 718 or 0.08 per cent spoke Gujaráti; 231 or 0.02 per cent spoke Tulu; 186 or 0.02 per cent spoke Márwári; 156 or 0.01 per cent spoke Tamil; 144 or 0.01 per cent spoke English; 130 or 0.01 per cent spoke Portuguese-Konkani or Goanese; 73 spoke Persian; 31 spoke Arabic; 17 spoke German; 3 spoke Chinese; 8 spoke Pashtu and one spoke Malayali,

The chief language of the district is Kanarese; Dharwar Kanarese differs considerably from the Kanarese of Maisur and Bellari. The style of writing in Maisur and Bellari is more elegant and dignified and many words used in those countries are not understood

Chapter III.
Population.
Census Details.
Houses.

destroyed, the fear of attracting the tax-gatherer by a show of comfort, and the difficulty of guarding a house with large windows and doors against robbers led even the well-to-do to live in houses built of the coarsest and meanest materials with no opening in the walls except a door purposely kept so small that no man could enter without stooping nearly double. The only light and air came through this small door and sometimes through small openings in the roof. They had no separate cook-room and when meals were preparing or water was warming the house became so full of smoke that it was impossible to stand. The inmates had either to sit down or lie on the floor. Especially in and near the town of Dharwar the newer houses have large doors and in many cases chimneys, and care is taken to have channels to carry cooking and bathing water to some distance from the door. A taste for gardens is also springing up. In one important point the Hindu houses differ from Musalman houses. The Hindu houses are open and the whole inside can be seen at a glance, and unless they wish to avoid being seen all the members of the household are visible. A Musalmín house is built so that from outside no part of the inside of the The household furniture includes brass and house can be seen. copper cooking and drinking vessels, large baskets for storing grain, carpets, beds, lamps, and low wooden stools. Except the rich few keep house servants. Husbandmen generally own two or more bullocks and he-buffaloes and one or two cows and she-buffaloes. Cats are kept in all houses and dogs in a few. In rare cases one or two monkeys, rabbits, pigeons, or parrots are kept in the house as pels.

Villages.

According to the 1881 census, thirteen towns had more than 5000 and four of the thirteen had more than 10,000 people. Excluding these thirteen towns, which together numbered 146,942 or 1664 per cent of the population, the 735,965 inhabitants of Dhárwár were distributed over 1272 villages, giving an average of one village for every 3.56 square mile, and of 578.58 people to each village. Of the 1272 villages 113 had less than 100 people, 190 between 100 and 200, 493 between 200 and 500, 308 between 500 and 1000, 114 between 1000 and 2000, thirty between 2000 and 3600, and twenty-four between 3000 and 5000.

Almost all Dhárwár villages seem to have been surrounded with walls, strengthened at intervals by towers. Most village walls and towers are ruined. In some places the wall stones have been used to build houses, and fences have been put up instead of the walls. Some old villages have stately gates and remains of moated forts. The foundations of village and of house walls to a foot or two above the ground are built with large stones. The rest of the wall is built of sun-dried mud bricks. Up to the last thirty or forty years the bricks with which forts village-walls and old houses were built were shaped like a triangular prism about a foot or eighteen inches long. Since then oblong bricks three or four inches thick, five or six wide, and eighteen long have begun to be used. In the red and sandy hill land in the west of the district bordering on the Sahyádris, called malnád or hill lands, the villages are shaded by large tamarinds, nims Melia azadirachta, mangoes, Indian figs pipals Ficus

Population.

COMMUNITIES

Outside of the villages are rengiosa, jamons, and a ten jack wees. Oneside of one vinages are gardens in which large quantities of cocoa and betel palms, plantains, gardens in various marge quantitates of cocoa and never paims, plantains, and vegetables are grown. The great black soil plain in the east of the district which is leading localing to the district which is leading to the district w religiosa, jámbuls, and a few jack trees. and vegetables are grown. The great plack soil plain in the east of the district, which is locally known as Belval or the open land, is

The village community varies greatly in different villages. It is bare except for a few babbul and nim trees. doubtful if a full staff of officers and servants is found in any single

village. Some of the small western forest villages have not even a vinuge. Some or one small western forest vineges neve not even to headman called patil in Marathi and gauda in Kanarese. In that headman called patil in headman's shows compliance includes two part of the district a headman's charge sometimes includes two

villages and an accountant's charge, called kulkarni in Marathi and shanbhog in Kanarese, includes a group of villages. Inan ordinary village in the centre and east of the district the village staff includes the Patil or headman, the kulkarni or accountant, one

or more shetsandis or village watchmen literally field owners who help the village police, and the taboar literally the swordsman who is the The office of headman is hereditary. He has generally the revenue and police charge of the village, the duties in Some cases being divided between a police headman who is responsible aume chase being divided neuvern a pointenament who is all matters connected with crime, and a revenue headman who called the Covernment Area. The headman of some villages are collects the Government dues. The headmen of some villages are village messenger. paid entirely in cash. As a rule their chief source of profit is an allotment of rent-free land. Most of the headmen are Lingsysts and a few of them are Brahmans or Musalmans. and a new of them are Dranmans or Blussimans. The village accountant, who is called knikarni (M.) or skanbhog (K.), keeps the willage accounts writes we the landbaldom, maint become accountant, who is called killed and all village jury findings. The office of village village jury findings. The office of village prepares returns and village jury findings. The office of village prepares returns and village jury findings. The office of village prepares returns and village jury findings. The office of village prepares returns and village prepares returns and village accountants are Rrahmans. stipendiary. Almost all village accountants are Brahmans. shetsandis go the rounds and help the police, and the chief business of the falwar is to aid in collecting the revenue and obey the orders The members of the village staff who come under the head of village servants as opposed to Government village servants are the angle or Lingayat priesty, the gram-joshi or village astrologer, the kizz or Musalman marriage registrar or in small villages the mulla or priest, the kelshi or barber, the badiga or villeges one mount of prices, one result of parties, the sonagar or goldsmith, the carpenter, the kammar or blacksmith, the sonagar or goldsmith, the bundhar or potter, the shimpigar or tailor, the agasa or washerman, The ayya, who is also called jangam, performs all the religious rites and ceremonies of the rillogo Tangaman the dhor or tanner, and the machigar or shoemaker. The gram-joshi or village astrologer, who is generally a Brahman, reads the calendar to the villagers, finds ont lucky and unlucky days for ploughing sowing and reaping and lucky and unlucky days for ploughing sowing and reaping and for most for marriages, officiates as a priest at the ceremonies of most and marriages, officiates as a priest at the ceremonies of most and decremonies of most and decremonic makes and of the village Lingsyats. Brahmanic Hindus, and draws up horoscopes.

He reads the kazi is seldom The kazi is seldom.

Brahmanic Hindus, and draws up horoscopes.

He reads the kutan and officiates found except in large villages.

He reads the he is raid small fees. at Musalman marriages and divorces for which he is paid small fees. The malla helps the kazi and by saying the Musalman blessing over them makes show and cettle leading that there there exist fact them makes show and cettle leading that the those that each fact. them makes sheep and cattle lawful food for those that eat fiesh. The badiga or carpenter makes and repairs the field tools required by the mile was build at the field tools required. by the villagers, and builds their houses. The kammár or blacksmith Chapter III. Population. COMMUNITIES.

does all the village ironwork. The sonagar or goldsmith examines the coins paid to Government and makes ornaments for the people. The kumbhar or potter makes earthen pots tiles and bricks, acts as torch-bearer, and performs certain rites when a village is attacked by an epidemic. They are to some extent paid in grain but chiefly in cash. Carpenters, barbers, blacksmiths. shoemakers, and other village as opposed to Government servants are generally paid in grain by the villagers.

In most villages the population is mixed. It is rare to find a village in which all the people belong to one caste. Dhors, Mochigars. Madigars, and Holayas as a rule live outside of the village site and Lamánis and Vadars generally encamp at some distance from the village, even when they are permanently settled. which the whole village is called are rare or unknown. As a rule invitations are confined to members of the family or at most of the caste to which the giver of the feast belongs. No limit exists as to the quantity of water to be taken by one family from the common sources of water-supply, or as to the number of cattle which one

family may graze on the village grazing ground,

Under the head of customs come the sixteen Brahmanic sanskirs or sacraments.1 Bráhmans anxious to have a name for holiness keep ten more ceremonies, and those who wish to perform any of the great Vedic sacrifices go through a third set of fifteen observances, making forty-one in all of which forty take place during their lifetime and one after their death. Like Brahmans, classes who claim a Kshatriya or a Vaishya origin perform most of the sixteen sacraments. Some of the sixteen sanskars are observed by lower class Hindus as Halepáiks and Kunchigars, but all their sacraments are performed without repeating Vedic verses. The most important of the Lingayat ceremonies are the tying of a stone ling to the right arm of a child after birth and the diksha or initiation ceremony when a boy is eight years old. Besides their peculiar customs, which, as far as possible are described in the account of each caste, certain practices and observances common to almost all upper class Hindus, deserve notice. If a cat crosses the path of a man who is starting on some business he goes home, waits for a time, and makes a fresh start. If A sneezes once when B is beginning some work, B stops for a time and then begins afresh; if A sneezes twice together B goes on with his work without stopping. If A sneezes on B's back B's back is slightly pinched. If A sneezes during a meal some one of the party calls on him to name his birth-place. The chirping of lizards is ominous. When a work is being begun or a subject is being thought over, the day of the week, the hour of the day, and the number of the chirps have all to be taken into consideration before deciding whether the lizard's chirp is a good or a bad omen When a mother bathes a babe she waves a few drops of water round its body and says, 'May you live long.' If a child does not eat his food the mother waves three morsels of food round the child's body and throws them to a cat or dog to eat, thus passing the evil or ill-luck to the cat or dog. If any one says

CUSTOMS

¹The details of the sixteen *sanskir* are given in the account of the Madhva Brahmans.

Chapter III. Population. Customs.

'How nice the child looks' or 'How well he walks' the mother of the child will turn sharp on the person who made the remark or one came war onest on one person who made one remerk and say 's Look at your left foot, it is soiled with mud. The mother heliages that he making the engaler look at mud she tame and say Louk no your 1010 1000, 10 15 Sound with mud she turns mother believes that by making the speaker look at mud she turns mother behaves that by maxing the spenage from left to aside the power of his evil eye. A crow crossing from left to sight to look is a lad right is a good omen; a crow crossing from right to left is a bad omen. It is bad to meet one Brahman, but two Brahmans are lucky, omen. It is used to meet one predumen, out two preduces are necky, and so is a low-caste man with a stick.

If the hanga (K.) chash (M.) or blue jay crosses a traveller's path from left to right the omen is or the pay crosses a cravetter's past from the W right one of the traveller bad; if it crosses from right to left the omen is good. If a traveller bad; if it crosses from right to left the omen is good. langers to see a blue jay perched on his right he leaves the road and maken a circle as at a road the hind on his last. He will do and makes a circle so as to pass the bird on his left. He will do this even though he has to walk an extra mile or two. If a man sees the face of a cat the first thing in the morning he is sure to meet with danger or to hear bad news. The faces of some neet with danger or to hear bad news. People avoid beginning the day with the sight of a bad face. If anything good or bad happens to a person it is usual to say, Whose face did you see this morning? People who set weight on these rules are graful not to come their order as seen as their order. careful not to open their eyes as soon as they awake. out for a wife, a son, or some other relation whose face has already proved lucky, and look at them as soon as they open their eyes. As it is lucky to see a jackal the first thing in the morning people tame a jackal and tie it near their beds so that they may see its the road, whether from right to left or from has a headache or other will return to his house. When a person has a headache or other will return to women and a few men remove the roan has a women and a few men remove the rain has removed the pain some women and a few men remove the pain by repeating a Sometimes charm and blowing on the part of the body which pains. they throw a pinch of ashes on the part that pains.

They are a pinch of ashes on the part that pains. and other pains are cured by a person who was born in divinor rubbing with his feet the part which pains.

The leaf or dich in which his food in 1612 when a man is diving it the leaf or dich in which his food in 1612 when a man is diving it the leaf or dich in which his food in 1612 when it is a man in the leaf or dich in which his food in 1612 when it is a man in the leaf or dich in which his food in 1612 when it is a man in the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich in which his food in 1612 when the leaf or dich running when his 1860 the part which his food is laid moves, it is a sign that the leaf or dish in which his food is laid moves, it is a sign that Except a small body of Jains most Dhárvár Hindus belong to he will have to travel.

two main classes, orthodox Bráhmanic Hindus who worship Bráhmania and local code memort Bráhmana and complex Bráhman two main classes, orthogonal property and employ Brahmans, and employ Brahmans Brahmanic and local gods, respect Brahmans, and employ and Shire their principles of their principles. as their priest; and Lingsysts who worship the Brahmanic god Shiv in the form of the ling, but do not respect Brahmans, and have priests of their own to perform their leading religious and social priests of their own to perform Tinder weekin local and wilder Most low-class Hindus worship local and village deities, chiefly Bassappa, Bladnappa, Dayamaya, The names of goddess of cholers, Hulgova, Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are Three Connetted the most widely warshipped Ruchmanic deities are the connected the conne the most widely worshipped Brahmanic deities are Durga, Ganpati, Rrichna Labehmi Rangha Chir and Vanlatamana The chief The chief Krishm, Lakshmi, Renuka, Shiv, and Venkataramana.

Tingayat doiting on Research Lingayat Mallibénim Nrisnna, Laksama, Kenuka, Saiv, and Venkataramana. Ningappa, Lingayat deities are, Basappa, Lingappa, and Vellamma. Bráhmans Subramhanya, Virabhadra, and Vellamma. Soliv, Subramhanya, Hindus worship house images of gold, steel. or bress corper bellmatal and stone but not of iron. sinc. steel. brass, copper, belimetal, and stone, but not of iron, zinc, steel, or other inferior motal other inferior metal. The Lingayats tie the ling round the neck and daily worship it before taking their meals. Lingayat ceremonies are conducted by their priests who are called Appas or Jangams. All

RELIGION.

Chapter III.

Population.

Religion.

classes treat their priests with great respect and honour them rather as temples or houses of their guardian gods. All Hindus and Musalmans have their fasts and feasts. Among Hindus Vaishnav Brühmans keep fasts and feasts more strictly than the rest Under the Peshwa's government each caste was compelled to keep to their own beliefs and practices. Under the British Government castes like the Sonagars or goldsmiths and the Badigas or carpenters have begun to adopt the way of worship and the religious rites of Brühmans.

Hindu maths or religious houses, Smart Vaishnav Jain and Linging. are found in all parts of the district. Each house is an independent institution and is under the management of a lord or svámi. The svámis acknowledge no head but their god and exact from their followers the greatest honour and submission. The svámi's duties are to worship and offer food to the idols, to enquire into and punish religious offences by fine or in default of payment by loss of caste; and to confer honorary titles and other rewards on the more learned of their disciples or on those who grant endowments in money or land. When a svámi dies, the crown of his head is broken with a cocoanut and his body is stuffed with salt and powdered mustad He is then buried sitting in some holy and lonely place. A store tomb is built over the grave and is called the svámi vrindávan a lord's altar. These tombs are daily washed and food is daily offered to the spirit of the deceased svámi. The person employed to do this work is called the ministrant of the tomb, and this office is generally held by the sons, brothers, or other heirs of the deceased svámi. To enable him to continue this worship the new lord generally grants the ministrants an allowance in money or land. People also make yearly gift to such ministrants, and from these sources of income the ministrants keep up the worship of the different tombs. The most famous local tomb is of Satyabodh Svámi of Sávanur, who died in March 1782. When a svámi is about to die he names a successor. If a lord dies before naming his successor, the new lord should be chosen by the votes of the followers. This rule is not often observed. Some forward person assumes the power and dignity of the deceased lord by bribing the servants of the religious house or by other fraudulent means. Before being made a svámi, a man is required to renounce all his family connections and become an ascetic. After becoming a svámi he must eat nothing but light food and that only once a day and must wear no costly clothes. A svámi must not remain at any one place except during the rainy season. During the rest of the year he must travel through the length and breadth of India teaching his followers. So strict are the rules of asceticism that after a man becomes a svámi he may never again look on his wife's face. Every day before meals he is bound to give such of his disciples as are present a few drops of holy water. Voishnav svámis must at stated periods brand their disciples with two red-hot metal seals bearing Vishnu's discus and conch-shell. The ordinary seals are of copper but gold seals are used to followers of rank. The only person whom a svámi cannot instruct or give holy water to or brand is his wife. While a svámi is worshipping his gods, all persons except the svámi's wife are

Chapter III. Should the swami's wife wish to see the god, the svami must leave the Place. Svamis have always Population. about them a large body of servants and dependants to help them Religion. in worshipping their idols. They keep soveral elephants, horses, and bullocks and carts to carry their baggage. They ride on elea place his local disciples are bound either to feed him and his retinue or to pay for their feed, besides giving sums of money equal to one or two months' income or more. Grants engraved on copper and stone show that the ancient Hindu rulers made syamis large endowments of villages, gardens, and lands. When the Muhammadans conquered the country, they are said to have resumed as many lands and villages as they could lay hands on. When Hindus acquired power under the Musalmans, they procured the restoration acquired power didder bits and sillages as well as fresh grants of other lands, of certain lands and villages as well as fresh grants of other lands, gardens, villages, and yearly money payments.

One was a first the representation of the last continue grants to the monestories. small grants to the monasteries. During the wars of the last century many Hindu chiefs and powerful officials and proprietors added to the andownients. The British Government inquired into the titles by which these endowments were held and continued genuine and legal grants resuming the rest. In this way the stamis hold lands, gardens, villages, and permanent money grants in the Madras and Bombay Presidencies, the Nizam's dominions, the territories of the Maharajas of Maisur, Travankor, and other princes, chiefs of petty states, land proprietors, and others. These grants were given with the object that the income should be employed in worshipping the gods, educating priests, expounding religious books, performing religious ceremonies, and feeding visitors to the monastery. Svámis take fees from their disciples on occasions of birth, thread-girdings, marriages, caste dinners, deaths, and anniversary or mind feasts to deceased ancestors, On these occasions a Bráhman servant of the svami dines in the house where the ceremonies are performed and receives 11d. to £1 10s. (Rs. 74-15) or sometimes more. A piece of cloth is also generally given. As these fees are troublesome to collect, the svamis form the right to collect them in the different divisions under their charge. farmer sublets his right of collecting in large towns or groups of villages, and the under-farmers collect the fees within their oharge. All the swami's followers, when they perform religious ceremonies, should invite the under-farmer to their house, feed him for one day, and make a present in cloth or in money or both. Should the chief farmer happen to be in the village when any ceremony is performed, he should also be invited, fed, and presented with money or cloth or both. Should any disciple neglect or refuse to fee the principal or the under-farmer, he is put out of caste and no one in the town or village dare attend, help, or associate with him on pain of loss of caste. few followers should there be no farmer or under-farmer, the follower, before he performs the ceremony, is bound to set apart a certain sum equal to the value of the dinner and present.

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Resigion.

apart are either remitted to the svami or paid to such persons as he may depute to receive thom. In this way the different arimis draw a very large revenue from their followers. The right of managing immovable property, collecting rovenues, and other money grants and religious fees, as well as of applying the income to the worship of the idols, paying and feeding the establishment. performing religious coremonies, and feeding such people of their own casto as may attend the monasteries, belongs to the svámi who sometimes entrusts the work to his son or favourite disciple. During the last contury much corruption has crept into the practice of svámis or lords regarding the use of endowments Instead of applying the income to its proper and other revenues. purpose each new scami squanders a large portion of it for the benefit of his relations. He allows his wife though he never sees her, his sons, brothers, and other relations and friends and their families to remain in his camp and to travel with him; gives them costly food and clothes; lends them palauquins and horses at the charge of the religious house; gives them large sums of money as presents; buys lands and villages for them to be enjoyed as private property in perpetuity, and helps them in other ways. Sometimes he gives villages and lands to his sons or other relations nominally to defray the expense of worshipping his tomb after his death, but virtually as rent-free grants. In this way the religious institutions are impoverished.

This description refers to the Brahman lords or srámis who are the teachers or gurus of the higher Brahmanic classes both Smarts and Vaishnavs. The position of the Lingayat spiritual lords or heads of religious houses closely resembles the position of the Smart and Vaishnav spiritual lords. The differences in detail are noted below under the head of Jangams.

Minor caste disputes are generally settled according to the opinion of the majority of the caste. In some classes all caste disputes and in most classes all serious caste disputes are referred for the decision of the spiritual teacher, the scami or guru. If a breach of caste rules is proved the teacher punishes the offender either by fine or by loss of caste. Like the higher Brahmanic and Lingayat classes, Bedars, Vadars, Kurubars, Holnyas, and Mochigars and other low castes have each a religious head of their own called a guru or spiritual teacher. The teacher is sometimes a member of their own caste who is either chosen to be their teacher because he leads a holy and ascetic life or because he belongs to a family of hereditary teachers. In other cases the teacher belongs to one of the classes of ascetic beggars or gosúvis. Among Bráhmanic and Lingayat Hindus the penalties of excommunication are severe. The excommunicated person and his associates are not allowed to eat, drink, or marry with men of the caste. No one gives them fire to cook or water to drink and if they die their castemen will not burn or bury their bodies. If the offender repents, pays a fine, and feeds the castemen he is restored to his former position. Among several of the lower castes the offender is forgiven if he treats his caste to a drink of liquor. In some cases before letting him back into caste

the gurn burns the offender's tongue with a hot iron or a nim stick. Except among Lingayats caste authority has of late grown weaker. Especially among the higher Brahmanic classes members pay less

attention to caste decisions than they used to pay.

Among all classes of Hindus priests and skilled artisans are declining in condition. On the other hand anskilled labourers prosper. Their services are more in demand and their wages are higher than in former times. There is little change in the condition of the landholders. Lay and even priestly Brahmans send their children both to vernacular and to English schools, and among traders Lingáyats and Komtis have also begun to attach importance to schooling. Horsekeepers, water-bearers, cooks, and other servants are forward in teaching their children in the hope of getting into Government service. Few of the professional classes take to new pursuits. Bráhmans, Lingávats, Komtis, and Maráthás are among the most rising classes.

There is no record of any considerable movement of people either into or out of the district.1 The town population has increased by the ordinary inflow from the rural parts and by the natural increase in population. It has not to any appreciable extent been recruited from a distance. Under the pressure of the 1876 and 1877 famine numbers of the poorer classes went to the Kanara forests to return when the famine was over. With this exception no considerable movement out of the district can be traced. No local trade or industry requires an inflow of outside labour. During the Indian miller harvest in December and in the cotton-picking season in Febrnary and March many labourers come into the district from Bellari, from the Nizám's country, and from Maisur. These stay for a month or two and return to their homes as soon as the harvest is over. They sometimes bring their families with them and sometimes men only come. In the rice-cutting season in October and November bodies of labourers move from the east of the district into the west to cut the rice. The rice harvest lasts a fortnight to a month. When it is over they return to their homes. Among no local class does the practice prevail of leaving the district and spending some years elsewhere. The only exception is among the small section of educated Brahmans, who seek service under Government, in Maisur, or in the Nizam's dominions. Such persons go wherever there is a chance of finding service and send for their wives and families as soon as they are settled. As a rule they return to the district at the end of their service. The bulk of the merchants and traders belong to the district. There is no class of traders like the Marwar Vanis of the Deccan who come to the district merely to make money, and have their homes in other parts of India. Merchandise formerly went chiefly to the Nizam's dominions, Maisur, and Goa. Since the opening of the metalled road to Kárwár most of the exports of the district pass west to the coast at Karwar. The only wandering tribes are the Advichanchars or forest-roamers, the Vadars who

MOVEMENTS.

Chapter III. Population.

¹ The 1831 census shows that 37,579 people born in Dharwar were in that year found in different parts of the Bombay Presidency. The details are, Kanara 17,232, Belgaum 8403, Bijapur 5016, Poona 439, Satara 413, Thana 391, Sholapur 304, Ahmadnagar 112, Ratnagiri 103, Nasik 78, Kolaba 58, and Khandesh 29.

Chapter III.

Population.

Bráhnans.

work in stone, the Laménis who trade in cattle thieve sell wood, and do odd jobs, and a few bands of professional beggars jugglers and travelling prostitutes.

Bra'hmans include twelve classes with a total strength of 28,395 or 3.46 per cent of the Hindu population. The details are:

Duarwar	BRAUMANS,	1881.
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CLASS.	Males.	l'emales.	Total.	CLAFS.		Males	Fomales.	Total.
Deshasths Golaks Kanojas Kanojas Kanthadas Konkanasths Shenis or Sáras-	122 742	11,605 3 139 638 117 707	24025 5 201 1323 239 1419	Sarvariyas Satáshes Shritaishnavs Rámánujás Tailangs Tirguis	OF	8 36 10 127 134 14,002	7 48 3 122 142 13,793	15 81 13 249 276 28,395

DESHASTHS.

Deshasths, numbering about 24,000 or 84.60 per cent of the Brahman population, are divided into two classes, Madhvas or Vaishnavs and Smart Bhagvats.

Vaishnavs or Mádhva Bráhnans are found all over Dhárwár in towns and large villages and seldom or never in small villages. In the twelfth century of the Christian era, the god Hanuman appeared in the form of the famous teacher Madhváchárya. Madhváchárya, who was also called Shrimadáchárya, Purnabodharu, and Sarvadnyáchárya, established three monasteries, the first at Udapi near Mangalor, the second at Madhyatala, and the third at Subrahmanya, all in the coast districts of Mangalor. He chose an ascetic of the order of sanyasis to be head of each of these three monasteries, and called them lords or svámis. The successors of the lords of the Madhyatala and Subrahmanya monasteries became the heads of distinct sects. Their followers form small bodies and all but a few who live inland are found on the Mangalor coast. Sarvadnya divided the settlement at Udapi into eight monasteries and chose a lord for each. He ordered the lord of each of the eight monasteries in turn each for two years to conduct the worship of the Udapi Krishna. The names of the eight Udapi monasteries are Adhmár, Konur, Krishnapur, Palvár, Pejavár, Putagi, Sirur, and Svádi. All these are in the town of Udapi. Under the arrangement introduced by Sarvadnya each of the eight lords takes his two years' turn of worshipping the Udapi Krishna, a fresh turn coming after the lapse of fourteeen years. The change of lords which is called paryáya or change happens once in two years when the sun enters Makar or Capricorn in the beginning of January. On this occasion a great fair is held at Udapi and hundreds of thousands of people come to make offerings to the god. The outgoing lord leaves with sorrow as he may never again perform the worship; the incoming lord takes charge with joy because the profits of the office are great. The followers of these eight lords have formed eight separate sects. Sarvadnya, the founder, superintended the whole of the ten Mangalor monasteries. He ordered that the power of the abbots of these monasteries should be limited to the country below the Sahyadris. He with four favourite disciples travelled over India and was acknowledged the Jagadguru or World-teacher of the

Of the writings of Sarvadnya thirty-seven Sanskrit religious works remain. In these books the founder of the sect has Population. rengious works rules of conduct which still guide his followers. Ho out-argued all rival teachers, and after eighty years of successful DESHASTHS. headship made over his priestly office to Padmanabhatirth the chief of his four disciples, and withdrew to Budrikashram in the Himalayas, where he is believed to be still alive. He retreated to Badrikáshram on the bright ninth of Magh or February in the Shalivahan year 1119 that is A.D. 1197. Sarvadnya's followers hold him in great honour. Every day before their meals they offer him food and hold a yearly feast on the day when he ceased to rule the church. Padmanábhatirth, who succeeded Sarvadnya, governed for seven years. On his death Narharitirth, the next favourite disciple of Sarvadnya, became Padmanabhatirth's successor and died on the dark fourteenth of Kartik or November in the Shalivahan year 1126 that is A.D. 1204. Though Narhari was generally accepted as pontiff a few of Padmanabha's friends established a separate religious house in his name. On the death of Narharitirth on the dark seventh of Pausha or January in the Sháliváhan year 1135 that is A.D. 1213, Sarvadnya's third disciple Mádhavatirth became pontification of the sarvadnya's third disciple manufacture of the sarvadnya's third di He continued head of the sect till his death on the dark fifteenth of Bliddrapad or August in the Shalivahan year 1152 that is A.D. 1280. His successor Akshobhyatirth, the fourth disciple of the great Sarvadnya, died on the dark fifth of Margashirsh or December in the Shalivahan year 1169 that is A.D. 1247, leaving the chief priestship to one Dhondo Raghunath Deshpande of Mangalvedhe near Bijapur. The reason why Dhondo Raghunath was made pontiff was that Sarvadaya used to teach his disciples in the presence of a bullock which carried his books wherever he travelled. Sarvadnya told his disciples that the bullock which had heard him read all his books would be born again in the family of the Deshpande of Mangalvedhe as Dhondo Raghunáth, and that, neglecting religion, he would enter the Muhammadan army, grow a beard, and be found crossing a river on horseback and drinking water from the hands of Musalman soldiers. He was to be soized, his head was to be shaved, and he was to be made chief priest in succession to the last of Sarvadnya's four disciples. Akshobhyatirth in crossing a river saw a horseman drinking water from Musalmin soldiers. He remembered his master's prophecy, and finding that the bearded horseman was Dhondo propnecy, and unding that the occurred noiselled him, shaved him, Raghunáth the Deshpánde of Mangalvedhe, seized him, shaved him, and appointed him his successor.

The friends of the countries are still Deshpandes of Mangalvedhe. The friends of the second third and fourth pontiffs, Narhari Madhay and Akshobhyatirth, like Padmanábhatirth's friends established separate religious houses in their honour and chose separate lords to rule the houses. Afterwards a difference of opinion caused a split in Akshobhyatirth's house. At the time of Dhondo's succession, besides the main sect of which he was the head, Madhyacharya's followers were divided into fourteen branch sects, the ten coast sects founded by Madhya and the four branch sects founded by the friends of each of his four successors. At a later date the fourth of the four sects, in honour of Madhya's successors, divided and so raised the

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number of branch sects to fifteen. These branch sects have few members; in many cases the only members are the friends and relations of the lord or svámi.

When Dhondo Raghunath was chosen pontiff, he took the name Jayarayacharya or the Victorious Priest. He was also called Tikakrataru that is the First of Commentators because as chief priest he became very learned and composed several Sauskrit books and wrote commentaries on Sarvadnya's thirty-seven works. Among the Vaishnav pontiffs Raghunath holds the place of honour next to Sarvadnya. Daily offerings are made in his name. After ruling for twenty-one years he died on the dark fifth of Ashadh or June in the Shaliyahan year 1191 that is A.D. 1269. He was buried at Malkhed. twenty-three miles south-east of Kulburga, and offerings are still No new sect was started in his honour. made at his tomb. Jayaráyáchárya was succeeded by Vidyádhiráj or the learned lord. In spite of his learning, dissensions arose between Vidyádhiráj and some disciples of the late Jayarayacharya, who started a new monastery and chose as its head Rajendratirth, whose successor Vyásráya rose to great power under the founder of the Anegundi or Vijayanagar state (A.D.1830) and gave his name to a new sect. Two successors of Vidyadhiraj governed quietly. The third Ramachandratirth, who succeeded on the third of Chaitra in the Shalivahan year 1265 that is A.D. 1343 was a man of unusual ability. Some of his disciples rebelled against him, founded a new monastery, and chose a new head under the title of Vibudhendra or the Lord This sect proved very popular and includes about of the Wise. one-third of the whole Vaishnav community. They are known as Rághavendra Svámi's sect from a very successful pontiff of that name who lived about 1624. Raghavendra died in 1671 and was buried at Mantralaya on the banks of the Tungbhadra in Bellari. Great respect is still shown to his tomb, which every year is visited by thousands of worshippers. Twenty-one pontiffs have ruled since Ramchandratirth, but no new sect has been formed.

The fifteenth in succession to Ramchandrafirth by name Satyabodhtirth became chief priest on the thirteenth of Chaitra or March in the Shalivahan year 1666 that is a.D. 1741. During a rule of thirtyeight years Satyabodhtirth travelled all over India and was respected by all the Hindu princes of the time. He was very learned and holy and performed such great austerities that the people were afraid to approach him lest he should discover their hidden sins. At the same time he was most generous and popular and is held next in order of merit to Jayarayacharya, or third to the great Sarvadnya. His name is so much revered that the chief branch of the Vaishnav sect, to which more than two-thirds of the Vaishnav people belong, is still known as Satyabodh's sect. In his time the religious house called Uttrade math at Savanur, and subsequently after his name called Satyabodh Svámi's math, gained great wealth. throne of gold and silver and precious stones about four feet square and six feet high was made and very costly jewels were bought for Ram the god of the monastery. Most of this wealth is enjoyed by the present chief priest Sattyaparayan who is the sixth in succession to Sattyabodh. He travels all over India wherever his disciples live,

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The names and dates of the thirty-five successors of Madhváchárya who have been heads of the leading sect since the end of the MADHVÁCHÁRTA PONTIFFS, 1187-1883. twelfth century are:

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The names and dates of the thirty-five successors of Madhvacharya who have been heads of the leading sect since the end of the twelfth century are:

MADHVACHARVA PONTIFFS, 1187-1883.

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22 27	Satya Pumaru Satya Vijayaru	13	17.0	1661	Chaitra .	Vad 1 Shud 1	Manomadhan.
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Mádhva Bráhmans hold a high position in Dhárwár where many of them have been settled for hundreds of years. They hold offices under Government, trade, enter the priesthood, and own land. They do not till with their own hands. Their home speech is Kánarese somewhat tinged by Maráthi and slightly different from the Kánarese spoken in Maisur and Bellári. In some families Maráthi

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is as much a home tongue as Kánarese. The names in common use among men are Bhim, Krishna, Ram, and Ranga; and among women Arli, Kopri, Lakshmi, and Yamna. Men are generally called after the names of gods, and women after the names of goddesses or of rivers. If a woman loses several children or if a family is unlucky, apparently with the object of making the evil spirit who is bringing them bad luck think that the child is held in small esteem and so is not worth sickening, they call the next child by some abusive name, Gundu or Kallu that is stone, Mannu that is dust, or Tippi that is dung hill. The words achárya teacher, anna senior, appa father, and raya king are added to men's names in token of respect; and to women's names are added akka mother, ava sister, amma mother, and bái lady. The Maráthi terms of respect bába father, dáda elder brother, nána a corruption of Náráyan, and tátya father are not in use. They have no regular surnames, though some families are marked by a distinctive place name or character name. a year the outer face of the walls is whitewashed and marked where the sweet basil eground-floor, the cook-room, and the place where the sweet basil or tulsi is planted are daily cowdunged and kept carefully clean. Among the rich the housework is done by servants, and among the poor by the women of the house. keep bullocks, cows, buffaloes, and horses.

Their gods are Krishna of Udapi in Mangalor, Narsinh of Ahobala in Madras and of Kopra in the Nizam's country, of Tirupati in North Arkot, and Vithoba of Pandharpur in Sholapur.

All the eighteen divisions of Mádhva Bráhmans eat together and such of the members of the three leading sects, the Satyabodhs the Rájendratirths and the Rághavendras, who live between the Eastern and Western Gháts or hill ranges intermarry. Persons belonging to the same gotra or family-stock cannot intermarry.

As a class Mádhav Bráhmans both men and women are handsome, strong, and well-made. The skin varies from fair in the west to dark in the east. A Bráhman of the Mádhva sect can be recognized by the shrimudra or the wealth goddess' stamp and other sect-marks on his forehead, temples, and arms; a married woman by the long red mark on her brow; and a widow by a single shrimudra or marks are duller in colour than those worn by Saváshe, Shenvi, and easily noticed by a stranger.

They live in one storeyed-houses of the better class with walls generally of sun-burnt bricks and roofs tiled in the west and flat in take only one meal aday. The laymen are moderate eaters and take two meals. Unlike their brethren in Maisur, Kánara, and Bellári, whose skill is proverbial, the Dhárwár Mádhvas are poor cooks. Their mustard seads, and other condinents of different sorts except ways and seasoned, also chatnis of coriander or sesamum seeds and

chillies, milk, boiled butter, curds, buttermilk, and sometimes millet,

wheat, or rice bread. Besides these articles their holiday food includes khir made of rice boiled with milk and sugar; kesharbhat made of rice boiled with water, clarified butter, almonds, raisins, cloves, cardamoms, and saffron; chitranna made of tamarind juice, sweet oil, salt, sesamum powder, and cocoa scrapings; vingibhát made of rice, water, brinjals, clarified butter, cloves, cardamoms, and condiments; hugi made of rice boiled with pulse, clarified butter, cloves, cinnamon, cardamoms, and pieces of dry ginger; and butti or dadhianna made of rice boiled with butter, curds, salt, pieces of raw ginger, and karbevu or Buraja kænija leaves. On fast days, when the regular food is forbidden, hunger may be relieved by pharál properly phalár that is phaláhár or fruit-eating. This fast-day fruit diet in practice includes the usual articles of food, except rice boiled in water called anna and pulse boiled in water These fruit or fast-day meals are of two kinds, light called tavi. The light fast-day meal is eaten by strict men and by and heavy. widows. It includes fruit and rice or millet flour parched and blown The parched flour is mixed either with milk and sugar, with curds salt and powdered chillies, or with tamarind juice and salt seasoned with chillies, mustard, assafcetide, and a few karbevu Buraja kænija leaves boiled in clarified butter or sweet oil. The parched flour is also mixed with sugar and clarified butter, or with salt, powdered chillies, and clarified butter. Sometimes instead of parched flour a preparation of beaten rice known as avalakki is used. To make this dish of beaten rice, unhusked rice is boiled in water, fried in an earthen pan, and pounded. The husks are taken off and the rice is beaten into thin plates. Sometimes the avalakki is fried in clarified butter and mixed with sugar or salt, powdered chillies, pieces of cocoa-kernel, and fried gram. Avalakki is again sometimes fried in clarified butter and mixed with sugar and almonds and raisins. When the avalakki is mixed, it is pressed in the hollow palms into balls about two inches in diameter. One or two of these balls form a light meal. A heavy fast-day meal includes wheat or gram cakes made either by baking or frying in clarified butter. Coarsely ground wheat is boiled either in water, sugar, and clarified butter, or in curds, clarified butter, salt, chillies, mustard seeds, assafœtida, and a few leaves of karbevu or Buraja kœnija. Men who are not careful to keep caste rules eat on fast days rice boiled in water, with clarified butter, mustard seeds, chillies, and salt. This is called akkinsali. Mádhva Bráhmans drink no intoxicating liquor. On festive

Mádhva Bráhmans drink no intoxicating liquor. On festive occasions they drink water in which the fragrant grass called vála Andropogon muricatum has been steeped, and sometimes, to improve its flavour and give it a yellowish tint, one-tenth of a grain of musk or pachkarpur, and sometimes camphor and saffron are dropped into the water. They use eight sweet drinks: (1) Sugar and water flavoured with saffron, cardamom-powder, and sometimes lemon-juice; (2) Wood-apple kernel mixed with water, sweetened with sugar and flavoured with saffron and cardamom-powder; (3) The scrapings of raw mangoes mixed with water, strained, sweetened with sugar, and flavoured with cardamom and pepper; (4) The fleshy part of

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a baked mango mixed with water, strained, sugared, and the whole flavoured with cardamom and pepper; (5) Milk boiled with sugar and flavoured with suffron and cardamom; (6) Coccoanut-water with sugar and lemon-juice; (7) Water mixed with pepper and coarse sugar and lemon-juice with or without lemon, raw ginger, and cardamom. Two sour drinks are used; Buttermilk mixed with salt and powdered ginger and flavoured with carbevu leaves, and dry wild mango stem or kokam rind, steeped, strained, and seasoned with salt and cocoa-kernel scrapings.

At all feasts, whether festive or funeral, the main dishes are the same; certain special cakes are added according to the character of the feast. A marriage cake at a funeral feast would not come much amiss; but to offer funeral cakes at a wedding would be very unlucky. In serving the food great attention is paid to the following points. On festive occasions salt is served first and clarified butter is served last. On funeral occasions clarified butter is served first and no salt is served. If any one asks for salt it is served after the meal is over and very unwillingly. The pulse uddu Phaseolus radiatus stands for flesh. A festive dinner may or may not have uddu, a funeral feast must. A festive uddu cake is called ambodi, a funeral uddu cake is called vadi. As soon as food is prepared it is offered to Vishnu. Then portions are offered to Lakshmi the wife and to Hanuman the servant of Vishnu, and to other lower deities, and lastly to all the departed chief priests in the order of their standing. offering of food to dead or living chief priests is termed hastodak, literally hand-water, because the original offering was not food but the pouring of water in the name of the priest and making a small money present. After offering the food the family priest three times pours a few drops of holy water into the right palm of every member of the family.1 All sip the water. The men mark their brows, bodies, and arms with their sect-marks, and begin to eat. dinner parties the priests begin and allow the laity to follow. layman begins to eat first the priests at once leave the house. No pious Mádhva priest will take food offered to Vishnu by any other person even when the offerer is a priest. Careless priests, children, women, and laymen take food after it has been offered to Vishnu by any priest. Among the Madhva priesthood the right of offering food to Vishnu is a common subject of dispute. All Madhya Brahmans take food offered by the high priest but by no one else. Madhva Brahmans clean their cooking and other vessels every time before they begin to cook, and change their dress before every meal. Madhvas eat off leaves either stitched together if they are small, or single plantain leaves or parts of plantain leaf. When a plantain leaf or a piece of plantain leaf is used on ordinary and on festive occasions care is taken to turn the point of the leaf towards the left or the front side of the eater. On memorial or death feasts, the point of the leaf or its direction is turned towards the right side of the two Brahmans who are fed first and who represent the dead

¹ The holy water is made by placing a shaligram stone on a chakra stone in a plate and pouring water upon it from a conch-shell.

parent. As soon as these two Brahmans finish their meal, the wife or other near relative of the person giving the memorial feast removes their leaf dishes and cowdungs the spot. Except children no Brahman takes more than one meal between sunrise and sunrise and sunset; they take, a second meal between sunset and sunrise. A widow takes, a meal during the day and a light or fast-day meal at night. Wearsh, a tenth and trealith of the bright and dark halves of second meal sunrise.

wears tenth and twelfth of the bright and dark halves of every A m month or new-moon days, on saints' days, and on the days water ich the sun enters the signs of Capricornus (12th Janu-On herd Cancer (21st June) Bráhman men eat a day's meal and a from theal at night. Brahmans of the Madhya or Vaishnay sect She what great merit springs from feeding Brahmans especially and food is given at night. Madhya Brahmans chew betel after cathis, smoke tobacco, and many take snuff. Both men and women Ess neatly and with taste. All, especially the priests, delight in ray colours. A baby, whether a boy or a girl, wears a cap called culai and a frock of bodicecloth. Two doubled square pieces of cloth are sewn together only on two sides, and to the lower ends of the insewn sides two tapes are fastened. When the two pieces are ppened they form a hollow into which the baby's head is put and the tapes are tied together under its chin. The cap and frock are called the huthu angi topgi or the birth cap and frock. They are kept for years and are put for a few minutes on the children and grandchildren of the original baby. Other caps and freeks are made ready for daily use. When the baby grows two or three years old round caps and jackets of ordinary doubled cloth are sewn for the use of boys, and small gowns from the waist down and bodices for the use of girls. When a boy is seven or eight years old, he is made to wear a regular loincloth like a man, a jacket, and a headkerchief a turban or a turban-shaped hat. Girls of seven or eight wear small robes and bodices until they marry. A girl wears the skirt like a petticoat without passing the end back between the feet. A man girds the shorter end of a loincloth round his waist, and fixes it by turning about an inch of the cloth upside down on his left side. He passes the shorter end between his legs, folds it forwards and backwards in plaits about three inches broad so that the border of the cloth may be visible, and tucks the fold behind. The longer end of the cloth in front is also folded vertically in the same manner. three horizontal feet from the front end the cloth is folded forwards and backwards in plaits about a foot broad. The vertically folded part is joined to the horizontally folded part, and the whole is tucked in the middle near the navel. If the cloth is too long und broad the middle part of the lower end is drawn up and tucked to the left of the navel. The dress is completed by a shouldercloth. When a man worships the gods or takes his meals he keeps a napkin by him to wipe his hands and face. After meals he wears a jacket, a headscarf or rumál, and a shouldercloth. He sometimes wraps a waistcloth round his waist, wears shoes, and holds a handkerchief in his hand. A married woman girds her weist with the plain end of her siri or robe which is of any colour, and fastens it by firmly knotting the upper corner of the cloth to a

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shaved. He wears an ochre-coloured cloth about six inches broad and three feet long, one end of which is fixed in front below the navel to a strip of cloth tied round his waist and the other end is passed between the legs and fastened behind to the same waistbelt. Over his shoulders he throws an ochre-coloured sheet about four feet by ten; he holds a holy staff in his hand, and wears wooden shoes. He wears the usual sect-marks, but no sacred thread and no ornaments.

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A woman whose husband is alive marks with turmeric powder and water her brow, cheeks, chin, arms to the elbow, and legs to the knee. On her feet, just above her toes, she draws two red lines beginning from the great toe and passing round the heel to the little toe. She marks her brow above her nose with an apright line of red and anoints her eyes with lampblack or kadgi. A small dot is tattoocd on her right cheek and on her chin, and a small crescent, with two dots on the brow just above the root of the nose. Some women also tattoo their hands. No Madhva widow, whether she is a woman or a girl, may mark her brow with red or wear the lucky neck-thread.

Ornaments are of two kinds, for men and for women. They are worn on the head, in the ears, in the nose, on the neck, across the shoulders, on the arms, on the wrists, on the fingers, round the waist, on the legs, and on the toes. Even if a person has a complete set of ornaments all are not worn at the same time. Among the rich, except leg and toe ornaments, all are of gem-studded gold. Kings and queens are alone allowed to wear gold leg and toe ornaments, because, except by kings who are gods, as gold is the goddess of wealth, it should not be touched by the feet.

The head ornaments worn by men and boys are the turái or bouquet and kalgi or pendants, jewels and pendants hung on the right side of the turban; the sirpench or head-crest, on the front of the turbau; the arleyeli or fig-leaf, a leaf of gem-studded gold hung on hooks from the middle of the brow; and the julpi huvu or hairflower, a small circular flower with gold bells, worn in the hair over the Boys under five have a tuft of hair above the ear on which to hang the bells. Huvus or flowers of the same form are worn by boys under five above the middle of the brow. The ear ornaments are, kadaku or blazing rings of gem-studded gold, worn in the earlobes; rontimuttus or single pearl rings, also for the lower part of the ears; hattivanti or single and tight rings, similar but smaller and tighter earrings; and bhikbali or a side earring, a gold ring set with pearls and a pendant emerald, for the middle of the right ear. The neck ornaments are tanmani or beads of life, a light pearl necklace, kanthi a gold chain, and gopa or protector, chains of rich gold, navaratnada kanthi or the nine-jowelled string of nine kinds of precious stones, multin of pearl, vajrad of diamonds, and kempin The arm ornaments are bahukirle or fame of arms, a gommed gold bolt worn by kings a little above the elbow, bajuband or side-tie a jewel tie for the arm, dastana or glove, a band of jewels worn by kings and warriors from the wrist to the elbow. ornaments are kadga of plain solid gold and sarpali or chain a solid gold band. On the fingers rings of different kinds are worn. The

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waist ornaments are uddhara or waiststring a chain of gold or silver wire, sonkadgejji or waistbelt of silver or gold bells worn only by boys under ten, and gumpgejji or a cluster of hells a variety of bek. girdle. The leg ornaments are sarpali or silver chains used by by under ten. Of women's ornaments, those for the hair are bytalmult. or pearls on the hair-parting, a pearl or gem-studded gold chain worn on the hair-parting and hanging to the brow; arleyeli or a banian leaf, a gem-studded gold leaf like the men's arleyeli fixed to the end of the gem-studded gold chain or bytalmuttu and allowel to hang down the brow; bindi bijori or gem-studded gold chain; tied in a curve from ear to ear along the border line of hair and brow and fastened to the end of the bytalmuttu and passing under the arleyeli; sheshphul or snake-flower, a sun-shaped gem-studdel gold circle fixed by gold hooks into the lmir about three inches above the right ear; archandra or half-moon, a gem-studded gold crescent fixed with gold hooks into the hair about three inches above the left ear; chandrakor or moon-part, a crescent-shaped gold ornamen! for the top of the head; kindgi a gold petal of the kindgi flower; hedi kiadgi a gold kiadgi petal with a cobra hood; nag or cobra, the hooded head in gold; mohar, the peacock, peacock shaped in gold; rakdi or a round gold plate worn on the crown of the head; chauri or spire shaped in gold, worn on the chief braid of hair near the neck; barekai or a jujube-berry, a small gold ball worn close to the chauri; huvu or flower, a round gold flower worn on the braid after it is twisted sideways into a half ball; julpi huru, a round gold flower with bells, worn by girls under five close over the ear; huvu, like the julpi huvu, worn by little girls above the middle of the brow; heralu bhangaras or golden braid, several joined pieces of gold studded with gems, worn hanging about two feet from the neck when the hair is left in a long hanging braid; huving, a crestflower, gili a parrot, sivhan a lion, and naulin a peacock, varieties of the bhangar or braid-cover consisting of gold flowers, parrots, lions, and peacocks worn by children; agar huvu or incense-flower, a small round gold flower worn on the side of the braid when it is twisted into a half ball; panpatti or leaf-fold, a string of pearls tied straight across the brow from ear to ear. The nose ornaments are mukhrái, a gem-studded gold nose-ring; gadia chaukli a form of the nose-ring worn by Deccan and Konkan Brahmans; besri, a flat gem-studded button of gold worn in the mulhrai hole; bulák, a gem-studded crescent worn in the central cartilage of the nose; mugathi, a thick gold pin worn in the left nostril; archandra or half moon, a gom-studded gold crescent worn by women in the right nostril; and mugli, a long plain piece of gold with a diamond and a large pearl, worn by old women. The ear ornaments are bugdis, a gem-studded gold pyramid or umbrella, worn in the middle of the ear; balia, a pearl triangle or a gem-studded gold triangle, worn below the bugdi; chandra or moon, bália a crescent-shaped bália worn like it under the bugdi, ghosáchi, khidki, havlad or cornl, barlin, gili or parrot, yoli, min or fish, and lol or pendant, are different bálias which may be worn one at a time; harlin bália worn on the back of the car; bali a piece of gem-studded gold worn in the ear-lobe; bendváli or light nosering, a simple váli worn

. daily; muttinváli or pearl nosering, a pearl-studded gold ring worn in the car lobe; rajra a diamond-studded gold ring worn in the lobe, and harlinvali a gem-studded gold ring worn in the lobe; ghanti or bells, a gold-bell hung from the car lobe; karnful or earflower, a gem-studded piece of gold worn in the ear-lobe; and chaulli or a square, four pearls worn in the lobe. The neck ornaments are mangalsulra or the lucky thread, the wedding thread, a small gold cup with a string of black glass beads. It is tied by the linshand round the wife's neck on the marriage day, and is worn until either the woman or her husband dies; sari or wire, a solid round gold ring; asli, a solid eight-cornered gold ring; shringar karmini or decorator, a gem-studded gold fruit tied close to the neck; gejjitiki or bell necklet, a necklace of gold beads and bells worked zigzag half an inch broad and worn tight to the neck; gundintiki or ball-necklace, a band of small gold balls; vajrad, multin, nagar, surli, and addiki tikis, varieties of the balls and zigzag bands of gem-studded gold cobra hoods, squares, and circles; kathani or a necklace of five, seven, nine, or cleven strings of small eight-cornered gold balls, each string being longer than the string above, so as to cover the whole bosom; quadia kathani or ball-necklace, a kathani with round balls; muttin kathani or pearl necklace, a kathani with strings of pearls instead of gold balls; pulli sara or necklace of Venetian gold coins; chandrahara or necklace of moons, strings of gold worked into moons and fixed one into the other, gomali sara, godi sara or wheat-necklace, surya sara or sun-necklace, yekvali sara or a singlefold necklace; maxin huvin sara or a mangos-flower garland ; godi hurin sara or a wheat-flower garland ; nanachi petia or Nana's box; and natchetra sara or the planets' thread are different loose necklaces of plain or gem-studded gold; and taita an amulet, lappah a brocade, tanmani or beads of life, and potche are different kinds of tight necklaces. The wrist ornaments are, gundu a wristlet of alternate gold balls and beads worn by babies; bindhi of plain gold for babies; tandlipol a necklace of gold rice-grains worn by women and girls; multinpot a bracelet of pearl-studded gold; geri patlai a lined bracelet string shaped; huvin of gold flowers; patlia of solid gold; harlad putti or coral-studded gold; muttin putti or pearlstudded gold ; gode dundu of gold doubled and adorned with parrots; note or circle, a gold writtet; todia or rope, round gold chains; hastkadga round gold rings; sirhalalata hastkadga gold rmgs ornamented with lion's heads; kankana, chhand, chandia, lasina or garlie, daria, channagete or gram, and pach or emerald, different kinds of bracelets; harlin doria, a bracelet studded with precious stones; hardi a bracelet of gold and coral balls; bildvar kadga of eight-cornered gold; kárli kankan a bracelet of zigzagged gold; and ranki also of zigzagged gold. Over the left shoulder and under the right arm a triple gold chain is worn like the sacred thread and called thangarad; and janicara a triple gold thread. It is worn by the rich both by men and by women. Among women, married women wear it under the robe and prostitutes over the robe. ornaments there are many rings of different kinds. The arm ornaments are ranki of gold folded on two sides in opposite directions; and nagmurgi or snako twist of plaited gold wire; and bajuband gold

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side-ties. The waist ornaments are path a solid gold band; makmáli patti or fold of Globe amaranth flower, an ornamented gold piece; raddina a gold chain; and armadi a waistband from which hangs a silver or gold ornamented plate two inches broad at the top and passing down to a point, worn by girls under three or four. The leg ornaments are sarpali or chains, plain silver chain rings; sarli, plain silver chain rings formed into a circle; moggi or silver chains with bud-shaped link ends; sindesái moggi or silver chains as worn in Sindia's court; pyzan lullu or silver chain rings; kalkadga, ornamented hollow silver rings; pádga or silver anklets and halgadga or silver milk-bracelets for babies. The too ornaments are kalangura, double stout silver rings worn by married women on the second toe, which must never be taken off; pillia mekti, sutlu, pirpillia, anmettu, gendu, minu or fish, and gunda halburna, thin flat silver rings for the four smaller toes, which women whose husbands are alive may or may not were

Madhya Brahmans are generally clever, hardworking, sober, clean,

and hospitable.

The chief duties of the priesthood are to read hely books or puring and expound their faith to the laity, to help them in their religious ceremonies, and to beg for alms. The higher laity hold positions in the lower and a few in the higher branches of Government service and as clerks in Government and traders' offices. They also trade in cloth, grain, coarse sugar, indigo, silk, and metal, and are moneychangers. Some hold lands and get them tilled, but do not till with their own hands. Boys begin to work about fifteen or sixteen. A few go to school and college and take a degree. The women mind the house, and do not help the men in their work. The traders are wholesale and retail dealers in grain, coarse sugar, silk, and indigo. They buy grain from the growers and sell it to their customers both exporters and local consumers. They bring coar-e sugar, indigo, silk, and yarn from Maisur and Bombay, and sell them to local traders and craftsmen. Those who are moneylenders make advances on the security of houses, lands, and other property.

The traders complain that the competition of other eastes has reduced their profits. They borrow at one to three per cent a mouth according to their necessity.

They are at the head of the local Hindus. The different subdivisions cat and meet on an equal footing, and they also associate on equal terms with some Smart Brahmans. Jains and Lingayats held aloof from them, and they held aloof from all classes of people except in a few cases from Smart, Konkanasth, Karhada, Kanva, Telang, and Dravid Brahmans. All classes except Jains and Lingayats cat food cooked by Madhya Brahmans.

The daily life of a man and woman depends on the family calling or craft. Children go to school. They keep the usual local and Brahman holidays. The ordinary monthly feeding charges of a middle-class lay family are 8s. (Rs. 4) a head, that is about £2 (Rs. 20) a month for a man, his wife, two children, and an aged relation or dependant. The corresponding cost of living to a priestly family is less than half this amount, as the members of the family are fed almost daily by the laity.

A small house costs about £30 (Rs. 300) to build and 2s. (Re. 1) a month to rent. Their furniture, including cooking vessels, beds, grindstones, mortar and pestle, and earthen vessels is worth about £10 (Rs. 100). A family of this class does not keep servants. The keep of a cow or a she-buffalo costs about 8s. (Rs. 4) a month. The yearly clothes charges are two pairs of waistcloths at 6s. (Rs. 3) a pair, three women's robes at 10s. (Rs. 5) each, six bodices at 2s. (Re. 1) each, and clothes for two children and an aged relation or dependant £1 (Rs. 10) that is a total of £3 4s. to £4 (Rs. 37-40). The clothes kept in store are not worth more than £2 (Rs. 20).

Mádhvas are a roligious class and have house and family gods. The rich have family priests, and the poor themselves perform the worship. The laity respect the priests of their own sect, and call them to conduct their ceremonies. The priests perform the worship of their own family gods. The laity worship the usual local and Bráhman gods, and keep all Bráhmanic holidays and feasts.

Every day of the Hindu year has its feast or special observance; but all are not commonly kept. The only person in the neighbourhood of Dhárwár, who, in modern times, has been scrupulous in keeping all observances was the late Mahárája of Maisur, Krishna Rája Vadar Bahádur. The leading feasts observed by the Mádhva Bráhmans of Dharwarare Ugadi or New Year's Day on the first of Chaitra or March-April. On this day the Madhvas oil their bodies and wear rich clothes. A pole is set in front of each Madhva's house. A piece of fine cloth is tied to the end of the pole, and over the cloth is fastened a silver or other metal vessel. In the morning, before any other food, the bitter leaves of the nim or Melia azadirachta are eaten. The new calendar is read and explained by the village astrologer, and money is given to him and other Brahmans. This is a good day for beginning any work. It is considered one of the three and a half luckiest days in the year. The two other leading lucky days are Dasara the bright tenth of Ashvin that is October-November, and Bali-pratipadathe bright first of Kartik or November. The half lucky day is Akshayatritiya or the bright third of Vaishakh or May-June. Ramanavmi the bright ninth of Chaitra or April-May the Madhvas keep as a feast in honour of the birth of Ram. The followers of Shiv fast. On the bright third of Cháitra or April-May in all Bráhman houses, whether Mádhva or Smart, the image of the goddess Gauri is set in some open place. The women of the house worship the image every day by throwing turmeric and redpowder over it and laying flowers and food before it. evening female friends and relations whose husbands are alive are When they come, wet turmeric powder is rubbed on their cheeks, hands, and feet. Their brows are marked with redpowder, and betel, flowers, sandalwood paste, perfumes, and soaked gram are given to each. Two women of the house wave lights and sing round the image and the visitors join in the chorus and then withdraw. This ceremony which is called the huvelia or flower-giving lasts thirty days, that is till the bright third of Vaishakh or May. Then the image is taken down and laid in some safe place in the house. The bright third of Vaishakh or May June is kept with much joy as Akshayatritiya or the undying third. This is a lucky day Chapter III.
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for beginning any undertaking. Madhva women keep the Jyesht or June-July full-moon as a feast that their husbands' lives may be prolonged. Smart women keep this day as a fast. Madhva women draw on a wall a figure of the beautiful Savitri, of her husband Sattyaván, his parents, an Indian fig tree, a snake, a river, Yam the god of death, and the he-buffalo his carrier. Savitri was told that her husband would die at sunset on the Jyesht full-moon. She went with him to the forest and as the sun set, he fell from an Indian fig tree, and a snake bit him. Yam came on his buffalo and carried off Sattyaván's soul. Sávitri followed and persuaded Yam to give her Sattyaván's soul. She touched the lifeless body and Sattyaván rose, and they lived together long and happily. Some time during Ashadh or July-August the parents of a newly married bridegroom send a silver goddess called Mangal Gauri or Lucky Gauri, a robe and a bodice and several girls' toys to the bride, and a robe and bodice to the bride's mother. These articles are received with great pomp and joy. The bride worships the goddess every Tuesday during the first five years of her married life. On these occasions female friends and relations are asked and treated as on other festive occasions and then allowed to go home. This ceremony is called the Ashádhpáti or Ashádh basket. In return some time during Shrávan or August-September the parents of the bride send a pair of waistcloths, a turban, toys, books, a silver inkstand, pens, and other things suitable for boys, for the use of the bridegroom, and a robe and bodice for his mother. These presents are received with great pomp and joy and a feast is held. This is called the Shrávanpáti or Shrávan baskot. first Friday in Shrávan or August-September the Friday Gauri is seated on a wooden stool, and worshipped. The worship is repeated every Friday and Saturday for five weeks. friends and relations are called and sing before the goddess, and on Friday evenings an elder in each family tells a story called the Friday Story. The other members sit and listen. On Saturday evening another story called the Saturday Story is told in the same way by an elder of the family and heard by the rest. On Friday the best and most costly meals are served as the Friday Gauri is fond of good living; on Saturdays the poorest and coarsest food is given as the Saturday Gauri, who is the elder sister of the Friday Gauri, likes poor and coarse food. The bright fourth of Shravan or August-September is a general feast in honour of the cobra. Men keep the day as a feast, and women as a half-The following day, the bright fifth of Shravan, is the great feast of married women. Girls go to their fathers-in-law's houses and They put on their best dress and ornaments, perfume and deck themselves with flowers, and sing, dance, play, and swing with their female friends. Rice is soaked in water, dried, pounded, and strained, and coarse sugar is boiled in a small quantity of boiled butter. Into this sugar, rice flour, poppy seeds, cocoa, and cardamom powder are put. The whole is kneaded into balls about an inch in diameter called tambhittu balls. Sesamum seed and coarse sugar are pounded into thick pulp which is made into balls of the same size called chigli balls. A few balls of both kinds, five dry

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cocoanut cups, a little turmeric and redpowder, an unsewn bodice. and betel are handed to each female guest and they all make similar return presents. The next day, the bright sixth of Shrávan or August-September is called the Varshtodaku or the entanglement of the year. If any trouble happens on this day trouble will go on during the whole year. All disputes are avoided, and to remove evil, cooked rice and curds are carried out and thrown in some pond outside of the town. On the same day an image is made of Shiral the faithful servant of king Sahadev. worship the image and offer it rice mixed with curds, and make balls of rice and curds. Girls give the balls to other girls and lay some on the bank of a pond. On this the sixth of bright Shravan Sahadev the youngest of the five Pándavs with his servant Shirál went hunting. Shirál was of great use to his master who in return asked him to name what he would like to have. Shirál asked that the day should be known as Shirál's Sixth. Shrávani or the Shrávan full-moon is a great feast. Brahmans change their sacred threads and make small presents to new sons-in-law. The dark eighth of Shravan is kept as Krishna's birthday. Madhvas fast on this day and feast on the next day. The bright fourth of Bhadrapad or September-October is called Ganesh-chauth or Ganesh's fourth and is kept in honour of the elephant-god Ganpati, who is worshipped as the god of wisdom. For several days feasts are given and dancing girls dance. Two peculiarities on Ganpati's Day are that women alone eat the food offered to the god and that on that night it is unlucky for any one to look at the moon. If you see the moon some one will slander you. To avoid the risk of slander a Brahman reads the story of the jewel Syamantak which tells how Krishna looked at the moon and was falsely charged with stealing the jewel, and how he cleared himself of the charge. The next day, the bright fifth of Bhadrapad, the Seers' or Rishis' fifth, is kept as a fast by aged women. On this day elderly women, whether married or widows, worship seven cocoanuts, calling them the seven seers Ágasti, Ángirasa, Atri, Bhrigu, Kashyap, Vasishth, and Vishvámitra, the seven chief stars in the Great Bear which have power to cleanse from sin. Brahmans are fed and presented with gifts. The first nine bright days of Ashvin or October-November are the days on which the god Venkataraman was married to his second wife Padmávati. The tenth day is Dasara. These ten days are marked by great feasting and rejoicing. Diváli or the feast of lamps is held on the dark thirteenth and fourteenth of Ashvin or October-November. Sons-in-law are asked to dine and are presented with gifts, and fireworks are let off. Bali Pádva, the bright first of Kartik or November is a great feast. Numbers of lights are lit in houses and temples. The next day, the second, is the sisters' feast when brothers visit their sisters and receive presents, and the third is the brother's day when sisters visit brothers and receive presents. On an uncertain day in Paush or January on Makar Sankrant when the sun enters the sign of Capricorn, a great feast is held and sesamum seed and sugar are handed among friends and relations. During the whole of the previous month when the sun is in Dhanu or the Archer, Madhvas take their breakfast at Chapter III.

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sunrise. On the fourteenth of dark Mágh or February-March comes Mahāshivrātra or Shiv's great night. During the whole night the ling or emblem of Shiv is bathed with cold water. The Smarts fast and the Vaishnavs feast. On the full-moon of Phálgun or March-April comes the Holi feast. In the houses of the rich a cake called holigi, a little coccanut, and a sugar scorpion are burnt on a special fire. The male members of the family walk round the fire three or four times making a noise and beating their mouths with their hands as if at a funeral. In the streets the people shout impure songs.

Madhyas are careful to keep the proper fasts. In the matter of keeping fasts Karnátak Mádhvas are stricter than Deccan Mádhvas, and less strict than South India Madhays. Fast days are of two kinds, full and partial. The full fast days are the bright and dark elevenths of every month and the dark eighth of Shravan or August-September. The partial fast or one-meal days are the days immediately before and after the full fast days, except the day before the dark eighth of Shravan or August-September. Other one-meal days are full and new moon days, days on which the sun enters a new sign, and all Sundays. Those whose parent or parents are dead must not take a second meal on their parents' death-days; no second meal should be taken on the death-day of a chief priest, nor on any of the fifteen days of dark Bhadrapad or September - October, which are allotted for offering food, cakes, and water to dead ancestors. All old and pious people and widows keep the full-fast days and eat only one regular meal on half-fast days. If the eleventh or fast day lasts into the twelfth the twelfth is kept as a second fast day and is called atirikta dvádashi or the empty twelfth. Again, if on either a bright or a dark twelfth the moon is in the mansion called Shravan that day becomes a second fast. When this happens to the forty-eight hours' fast eight hours are added in advance, making a total of fifty-six hours during which nothing is caten and only a few drops of sacred water are drunk Besides these regular fasts and half-fasts some bind themselves by certain rules such as never to take food more than once a day. During the four months between the bright twelfth of Ashadh and the bright twelfth of Kartik that is about the middle of July to the middle of November, the pious and aged do penance or vrat. During the latter half of Ashadh they eat only rice-water in which split pulse is boiled, wheat cakes, salt, clarified butter, milk, curds, and powdered pepper, and dry ginger or vegetables and tamarind are avoided. During the second month or Shravan curds are avoided, in the third month or Bhádrapad milk is avoided, and in the fourth month all grain or fruits whose seeds can be split in two are avoided. Other penances commonly observed by pious and aged Madhvas are to fast strictly on the new and full moon, on the bright and dark elevenths, and on the day on which the moon is in Shravan. This is called Vishnupanchak or Vishnu's five fasts. Again some strict people cat only every other day, a practice which is known us dharni-parni or fasting and breakfasting. Or the rule of alavan or saltless food, or of ekánna or one-grain is kept for a year.

Others keep the rule of maunavrat or meal-silence refraining from speaking during meals, or the at once or ekavádi service when every article wanted for a meal is served before the dinner is begun. At the end of the year in which a vow of this kind has been kept Brahmans are fed and presented with money, and a ceremony called uddiapanor fulfilling is performed. There are a few stricter and more Thus in the Chandrayanivrat or moon-keeping unusual penances. penance the devotee takes only one morsel of food on the first day of the moon, two morsels on the second, three on the third, and so on to fifteen on full-moon day. So too in the waning days the allowance of food varies from fourteen morsels on the first dark day to nothing on the no-moon day. exception to the steady waxing and waning are the two elevenths on neither of which is any food eaten. Another penance is a five days' fast. This is called Bhishma's Five Days' Fast after the grandfather of the Pándavs.

The chief places to which Mádhvas go on pilgrimage are, in the Madras Presidency, the shrines of Venkataraman at Tirupati in North Arkot, of Narsinha at Ahobala in Karnoul, of Krishna at Udapi in Mangalor, of Varad Raje at Kánchi or Conjiveram, of Kalhasteshvar at Kalastri, of Shriram at Rameshveram near Cape Comorin, and of Ranganath at Shrirang or Seringapatam in Maisur; in the Nizám's country Amba-Bhaváni of Tuliápur; in Bombay Mahábaleshvar at Gokarn in North Kánara, Mahálakshmi at Kolhápur, Vithoba at Pandharpur, Bánshaukari in Bádámi, Shrirám at Násik, and Krishna at Dwarka in west Káthiáwar. And in Bengal Vishveshvar and Bindumadhav at Benares, Krishna at Gokul, Krishna at Vrindávan, Náráyan at Badari, and Vishnu's feet at Gaya. Some visit Tirupati in North Arkot and Pandharpur in Sholapur once a year, others go occasionally, others never go. The Madhvas have a spiritual teacher called guru or svami who belongs to their own sect. When a svámi dies some other holy Bráhman of the same sect fills his place. The new teacher becomes an ascetic and then takes the office of teacher. Sometimes the brother or nephew of the deceased teacher succeeds, but never his own son. A teacher may be married, but after he becomes a teacher he never again sees his wife's face. The Madhyas believe in sorcery, witchcraft, and soothsaving.

Under the head of customs come the sanskurs or sacraments. They are of two kinds nitya or usual and naimittik or special. The sixteen usual sacraments must be performed: the performance of the twenty-four special sacraments is a matter of choice. The sixteen sacraments are the garbhádhán or the conception that the woman may conceive, performed soon after the girl comes of age; the punsavan or the son-giving, that the child may be a boy; the anavalobhana or the non-longing, during the seventh month of pregnancy that the child in the womb may grow, when the juice of sacred grass is dropped down the woman's left nostril; the simantonnayan or the carrying to the limit, in the sixth or eighth month, when the woman's hair is parted down the middle, a thorn is drawn

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over her head and fixed into her hair behind; the vishnubali or Vishnu offering during the eighth month, to free the child from sin and ensure a safe birth; the játkarm or birth ceremony when on the birth of the child, before the cord is cut, honey is dropped into its mouth; the námkarm or naming, on the twelfth day when also the child is cradled; the suryúvalokan or sun-showing in the child's third month, while she shows the child to the sun the mother holds a churning stick in her hand; the nishkraman or getting out, in the third month when the child is taken to a temple and well water is worshipped; the upaveshan or sitting in the fifth month when the child first sits on the ground; the annapráshan or bread-eating the first feeding on solid food in the fifth or sixth month; the chaul or shaving in the fourth or fifth year; the upanayan or initiation also called the munji from the grass Saccharam munja, the girding with the sacred thread in the boy's seventh or eighth year; the samávartan or the freeing from being a Brahmachári on the twelfth day after the munj; the vivéhe or marriage at any time after the eighth year; and the svargárohana literally heavenmounting that is death. The chief of these sacraments are those at birth, thread-girding, marriage, puberty, pregnancy, and death.

For her first delivery a girl goes to her parents' house. As soon as she is in labour a midwife is called. If she suffers much old gold coins are washed in a little water and the water is given her to drink. When the child is born an ancestral gold ring is dipped into honey and some drops of honey are let fall into the child's mouth. The navel cord is cut, the child is bathed, and the after-birth is put in an earthen pot and buried. The mother is laid on a cot and is kept fasting during the rest of the day. On the third day the child is bathed, and the bathing water is run into a small hole called kuilkuni made in the floor of the lying-in room. A woman whose husband is alive and who expects to become pregnant, is asked to dine for ten days. The bath-water hole is worshipped and food is offered to it. The babe is bathed on the fifth, seventh, ninth, and tenth days. On the fifth day Jivti or the goddess of life is worshipped, and a woman whose husband is alive and who has a babe at the breast is asked to dine. Food is offered to the goddess and the woman is fed. On each side of the outer door-frame of the lying-in room and on each side of the street door rude little figures, one head down the other head up, are drawn with ink or lampblack to scare evil spirits from the house and the room. On the seventh day seven women whose husbands are alive are each presented with seven betel leaves, seven nuts, seven cocoanuts, cups, and a little dry ginger powder mixed with sugar and clarified butter. This ceremony is called geddavillia or betel-handing. It is held in honour of the child's escape from the dangers of the fifth night spirit Shetvi who on that night comes to carry off the child. Nothing is done either on the eighth or on the ninth. On the tenth, the hearth, on which during the nine previous days the mother's meals were prepared and all the cooking vessels are

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cleaned, worshipped with flowers and redpowder, and presented with food. A feast is held and cakes are sent to friends and relations. During the first ten days, to keep evil from the child, two Brahman priests read the ratrisukta or night-quieting prayer. On the eleventh they are fed and given money, and, on the same day the child and the mother, and if it is not the first child, all its brothers and sisters are anointed. Besides the usual festival dinner, a dish called hugi is made by boiling rice and split hesru or green gram in water. Sesamum seed, tamarind, salt, and chillies, are ground into a paste called chatni, and this paste and the rice and gram or hugi are served with the other food. Part of the hugi is made into ten cups and pyramid-shaped balls each ten inches broad. The cups are filled with oil and a wick, and lighted, and one cup and one pyramid are set near each of the four legs of the mother's cot. A cup and a pyramid are laid on each of the four sides of the bath-water hole and the remaining two cups and two pyramids are placed on the spot where the child was born. Some raw rice is laid in a basket, a figure of the god Bulrám is drawn on the rice, and for a few minutes the child is laid on the figure in the idol's room. Then the child is brought back and a churning stick is laid beside it. The mother rubs both her palms with oil and redpowder and five times stamps the wall with her hands, two pairs near the top of the wall, two pairs near the foot of the wall, and one pair about the middle of the wall. Lights are waved round the mother and the babe. Betel is handed and the guests withdraw. The eleventh day ceremony is called erlu. On the twelfth a grand feast is held and the cradle, is ornamented and worshipped. The women who came on the third, fifth, and seventh days are asked to dine. Some guggari or spiced soaked gram and a grindstone are laid in the cradle. In the evening the child is laid in the cradle and named by its father's sister. The name-giver is presented with a robe and a bodice, and the women of the family give her three or four gentle blows on the back.

When the child is three or four months old and begins to turn on one side, a feast is held and cakes called kadbus are made and When the child learns to fall on its face cakes of wheat flour called polis are made and eaten. When the child first crosses the threshold of a room other cakes of wheat flour called kadbus are made and eaten. When the child begins to press one palm on the other, sweet balls are made and eaten. The ears of the child are then bored for earrings. If a woman's first born is a boy, she makes a vow that until her son is married, she will not eat the climbing vegetable called hagalkai Mumordica charantica or pass under a bower of this climber, or cat boiled rice served from a bamboo basket, or from an earthen pot, or eat the relish called sar that is tamarind boiled with water and condiments and seasoned, or eat from a plantain leaf whose top is not cut, or cross a stream in which rice has been washed, or wear a green bodice robe or bangles, or ride in a green litter or carriage, or sit on a three-legged stool or chair. During the marriage, the boy's mother-in-law makes his mother break her vow, and presents her with a gold bangle called the karlibali which is a star or

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circular saw-shaped ornament. In return the boy's mother fastens a gold hagalkai fruit Mumordica charantica to one of her daughter-in-law's necklaces, to make over to her the duty of keeping these rules until her son gets married.

Eight is the usual age for a boy's thread-girding. months Magh or February-March, Falgun or March-April, Chaitra or April-May, Vaishakh or May-June, and Jyesht or June-July, that is the season from mid-February to mid-July, is the right time for thread-girding. In any one of these months the astrologer chooses a lucky day paying special attention to the month in which, the constellation under which, and the hour of the day at which, the boy was born. A few days before the ceremony the house is cleaned and whitewashed and a porch is raised in front of the house, and its posts are ornamented with plantain trees. mango twigs, and flowers. On the western side of the shed an altar is raised facing east. Red-marked invitation letters are sent to friends and kinspeople. Two or three days before the chosen day Bráhmans are fed in honour of the family gods or kuldevtas, the village or local gods called grandevtas, and the special or chosen gods called ishtadevtas. A day before the lucky day comes the ashtavarga or eight-people ceremonies. Lighted lamps are laid in a plate containing water mixed with turmeric and lime, and two married women wave the plate round the family gods. Then the boy, his parents, and their nearest relations are made to sit on a carpet in a line, their bodies are rubbed with oil, and the plates with the lighted lamps in them are waved round their faces. Next the party are taken to the shed or to a bathing room, where they are rubbed with turmeric and oil and bathed, and lighted lamps are again waved round their faces. Next Ganpati or Ganesh, and the Matrikas or Mothers are worshipped, and Punyáhváchan or the holy-day blessing ceremony is performed, and near relations give presents to the boy and his parents. After this twenty-seven betelnuts representing the or joy-bringing guardians and six betelnuts representing the booth-guardians or mandap devlas are placed in a winnowing fan aud worshipped with flowers and redpowder. The winnowing fan is carried into the house and laid in the family god-room. Bráhman men and women are fed and presented with money. Early next day at the boy's house musicians begin to play, and a Bráhman astrologer comes, sets up his water-clock, and sits The boy is anointed with oil and turmeric and watching it. bathed. A barber is called and the boy is shaved leaving three locks if he belongs to the Rigved, and five locks if he belongs to the Yajurved. The boy is again bathed and taken to the dining hall. Boys called battus who have been girt with the sacred thread but are not yet married, are seated in a row and served with food. They eat, and the boy's mother sitting in front of the boys and setting her son on her lap feeds him and herself eats from the same plate.

¹ When, in pursuance of a vow, munj or thread-girding is performed at Tirupati, Udapi, or some other sacred place, it may be held during any month of the year.

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This is called mátrubhojan or the mother's meal. It is the last time when the boy and his mother eat from the same plate. As soon as the mother's meal is over, the boy is taken to the barber who shaves all the locks that were left on his head except the top-knot. The hoy is bathed and is seated on a low wooden stool which is set on the altar; and his father and mother sit on either The chief priest, the Brahman astrologer, and other Brühmans chant the mangalishtaks or eight luck-giving hymns.1 When the lucky moment comes the Brühmans cease chanting, the musicians raise a crash of sound, the guests clap their hands, and the Brahman priests and guests throw red rice over the boy. The chief priest kindles a sacred fire on the altar and throws into the fire offerings of clarified butter, sesamum, and seven woods.2 The priest winds three folds of yellow cotton thread round the boy's waist, and gives him a loincloth or langeti about three inches broad and two feet long. The boy takes a sacred thread and a copper or silver coin and dipping them in water gives them to the priest. The priest formally girds the boy with the sacred thread one part of which rests on the boy's left shoulder and the rest falls below the right arm. The boy is either given a deer's skin to wear or, as is more usual, a piece of deer skin is tied to his sacred thread and a palas or Butea frondosa staff is placed in his hand. Money presents are made to Brahman priests, and cocoanuts, betelnuts and leaves, flowers, and perfumes are handed among the guests. At noon the boy is made to say his midhyanha sandhya or midday prayers, and in the evening he is made to repeat his suyam sandhya or evening prayer. In the evening, offerings of sesamum-seed and clarified butter are thrown in the sacred fire which was kindled in the morning and rice is boiled on the fire. Part of the boiled rice is offered to the fire and the rest is eaten with milk by three Brahmans. The eating of this rice is believed to carry the sins of the boy into the body of the eater. Brahmans will not run the risk unless they are well paid for it. The mother of the boy comes and stands before him near the altar. The boy says to her Bharati bhiksham dehi or Be pleased to give alms, and holds a cloth wallet before her. The mother blesses him and throws into his wallet some rice, fruit, and a small gold coin. This mother's gift is worth more than anything the boy will earn to the end of his life. The boy's father next steps forward and the boy repeats to him the words he addressed to his mother, and holds out his wallet. The father throws rice, fruit, and a gold or silver coin into the wallet and retires, friends and kinspeople go to the boy in turn, each is asked to give alms, and each drops rice and silver coins into the wallet. Next the twenty-seven thread-girding or

aspera, and chami Mimora suma.

¹ The substance of the hymns is: 'Sun moon and planets, signs of the rodine, stars that he may the path of the moon, and all constellations and gods of the sky and earth and guardians of all quarters of heaven, do ye bless this boy and give him life, learning, and well-heing.'

The seven woods are: palas Butea frondors, ashrath Ficus religious, umbar Ficus glomerata, Ihair Mimous catechu, rui Calotropis gigantea, ayhdda Achyranthes and shari Mimous catechu, rui Calotropis gigantea, ayhdda Achyranthes

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muni deities and the six booth deities are worshipped and food is offered to them, and Brahmans and friends and kinspeople are feasted. Before the Brahmans have begun to cat, the boy goes to several of them with a small plate and says, Bhavati bhiksham dehi or Be pleased to give alms, and each lays a morsel of food in When he has collected some food-gifts the boy lays the plate before him and sits on a low wooden stool. When the Brahmans have begun to eat, the family priest comes and sits near the boy and teaches him the prayer to be said and the rites to be performed before partaking of food. He eats a little of the cooked rice which was given him by the Brahmans and then takes his usual meal. This completes the first day's ceremonies. On the second, third, and fourth days the boy is taught to say his morning midday and evening prayers, and is made to worship the sacred fire which is kindled on the first day. The twenty-seven deities called núndis and the six booth deities called mandap-devtas are daily worshipped and food is offered to them. For four days several Brahmans are feasted every day, from each of whom the boy begs food as on the first day, eats a part of it, and then takes his usual meals. On the fifth day the last ceremony of the munj or thread-girding which is called the medha-janan or mind-giving is performed. In the booth near the altar a small square earthen mound is raised, and in the centre of the mound a palas branch or twig is planted. The boy pours water round the plant, prays to Savitri the goddess of mind, and offers her food. The thread-girding nandis and the boothguardians are then asked to withdraw. The guardians are dismissed by throwing rice on the winnowing fan in which they are placed and they are asked to come back to the next thread-girding. The boy is dressed in fine clothes, and is decked with ornaments and is taken in procession with music to a temple in the village, where he worships the idol and returns home. On the eighth, fifteenth, and thirteenth days good dinners are given to the boy and other members of the family and lighted lamps are set in a plate filled with red-coloured water and are waved round the boy's face by two married women.

Marriage.

Boys are married between eight and twenty, and girls between four and eleven. In return for large sums of money girls of ten are occasionally given to men of sixty or seventy. The offer of marriage comes from the girl's parents who send her horoscope to the boy's house. The horoscopes are shown to an astrologer who says whether they agree. If the astrologer declares against a marriage, nothing further is done. If he declares for the marriage, the parents of the bride and bridegroom settle the dowry or vardakshina and the presents or varopchar to be made to the bridegroom by the bride's father; and the value of the silver and gold ornaments and clothes to be given by the bridegroom's father; also the presents in clothes or money to be given by the bridegroom's party to the bride's parents, sisters, or brothers, to the bride's family priest or purchit, to the village astrologer, to the mathádhikári or monastery-agent who comes yearly for a subscription, and to the katti or hereditary agent of the local svámi or lord. The corresponding presents to be given by the bride's family are always

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double those given by the bridegroom's family. During the marriage one of the bridegroom's sisters is chosen to be his kalasgitti or best maid ; she must always sit on his right side during the religious part of the marriage ceromony. If she is not under ten, some one under ten acts for her. So also one of the bride's sisters becomes her kalasgitti or best maid, and must always sit on her right side. During the marriage great honours are paid to the bride's and bridegroom's best maids and handsome presents are given them. When the presents are settled, two copies of written agreements are prepared and signed by both parties and, before Vishnu Brahmans and other witnesses, are marked with kunku or redpowder and clarified butter. The bride's father hands one of the agreements with betel to the bridegroom's father, and he makes over the other paper with betel to the bride's father. Presents are given to Brahmans, betel flowers and perfumes are handed, and the guests withdraw. Both parties are now bound to carry out the wedding. Soon after some of the bride's and bridegroom's relations and friends hold a gadaguur or water-pot ceremony. An earthen pot or kalash is filled with water and set in a suitable place in the house. If it is in the bride's house, the bridegroom and his parents, and if it is in the bridegroom's house the bride and her parents are called. When they come, they are anointed with turmeric, oil, and warm water, and all worship the waterpot. After the waterpot has been worshipped, a dinner is given, and before the guests leave, the bride or the bridegroom is presented with clothes. Several such entertainments are given by friends and relations.

When the time for the wedding draws near, after the astrologers have named a good day, the first thing at both the bride's and the bridegroom's is to hold the sajjigi muhurt or the preparatory luckymoment coremony by preparing cakes of coarse wheat flour and feeding a few Brahmans and their wives. The next thing is to give a dinner in honour of the family gods called deva-samárádhana or propitiation of the gods. Two or three days before the wedding, both at the house of the bride and of the bridegroom, large booths are built. The booths are lined with sheets of white or coloured cloth and the ceiling and posts of the booths are decked with many mango leaves. At the bride's house in the western side of the booth facing east, an altar about six feet square and one foot high is raised, and at its western edge is built a wall about six inches thick and two feet high. The wall is whitewashed and diagonal lines in redpowder are drawn over it with a circle representing the sun, and a crescent representing the moon, and on the middle of the wall the name of the god Vyankatesh or the words Shri Lakshmi Vyankatesh Prasanna that is Oh Laksmi, Vyankatesh, be pleased, are written in redlead. Next, at the houses of both the bride and bridegroom the marriage gods are installed and the worship of Ganpati, Punyáhaváchan, and Matrikas is gono through, and, to appease the spirits of dead ancestors, the naudi shruddh ceremony is performed. The bride and bridegroom are anointed with turmeric and oil, bathed in warm water, and their brows marked with redpowder or kunku. Five women, whose husbands parents and parents-in-law are alive, are chosen to be heltalgorierus that is

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bridesmaids. It is their duty to paint with white and red-wash level upright and cross lines on the stone mortars and wooden pestles and grindstones. They pound wheat in the striped mortar and grind it in the striped grindstone. The flour of this ground wheat is mixed with water, an image of the elephant god Ganapati is made of the mixture, and it is worshipped by the women. This rite is called the varalakki and is performed both in the bride's and bridegroom's houses. After the wheat Ganpati has been made and worshipped, all the women of the family whose husbands are alive and the bride or bridegroom, as the case may be, sit close tegether on wooden boards. A thread is wound five times round the group, and they rub their bodies with oil and turmeric, and bathe in warm water. This is called the surgi bathing. A day or two after the thread encircling. generally on the day before the wedding day, comes the simantpujan or boundary-worship of the bridegroom. If, as is generally the case, the bridegroom belongs to another village, when he reaches the border of the girl's village the bride's parents come to meet him. The mother pours water over his feet, and the father washes his feet, and the father and mother together wipe them. Sandal pasto or gandh and other perfumes are rubbed on the bridegroom's body, flower garlands are thrown round his neck, and he is presented with a turban and other clothes. Two or more married women wave a plate with red water and a pair of inch-high lighted lumps round the face of the bridegroom. When the lamps have been waved round the bridegroom's face, a cocoanut is placed in his hands and with the keenest joy, with music, fireworks, and dancing girls the bride's parents lead him and his party to a house which has been made ready for them. All this time the bride keeps close in her parent's house. A good dinner known as the rukhvat or refreshment is cooked at the bride's, and carried and served at the bridegroom's lodging. In the same evening, an hour before the time fixed for the wedding, the bridegroom, richly dressed and on a richly harnessed horse with music and dancing, is led to the bride's. When they reach the bride's marriage booth the music ceases till the wedding moment, but the dancing girls keep dancing. parents of the bride and bridegroom meet, and the two family priests thrice call aloud the genealogy of the bride and bridegroom for four generations back and their family stocks.2 The bride's father formally promises to give his daughter to the bridegroom, and as he makes the promise, ties a turmeric root, betel, and rice, firmly in a corner of the bridegroom's shoulder-Then the bridegroom's father promises to take the girl for his son, and as he promises ties turmeric, betel, and rice, in the bride's father's shouldercloth. While the genealogy is being recited and the promises are being made, the astrologer is looking

¹ Care is taken to have at least two lamp-wavers. One lamp and one lamp-waver

² The proclamation or bans run: The great-grandson of A of the family of Jamadagni, the grandson of B, the son of C, the bridegroom D, now under the favour of Vishnu takes in marriage the great-granddaughter of E of the family of Kashyap, the granddaughter of F, the daughter of G, the bride of H, who is, under the favour of Lakshmi, the wife of Vishnu.

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at his water-clock and watching the approach of the lucky moment. About five minutes before the moment the parents of the bride and bridegroom worship the water-clock with redpowder, rice, and flowers, and make presents to the astrologer. The bride and bridegroom are led to the marriage altar and two men hold a cloth between them. At the lucky moment the cloth is drawn aside, the bride and bridegroom throw a few grains of red rice on each other's heads, and for the first time see each other's faces. this instant the whole company throw grains of red rice on the newly married couple, guns are fired, and music is played. All the priests present recite the eight Sanskrit hymns which form the marriage service called manaláshtak or the eight lucky hymns. While the hymns are being chanted, the bridegroom draws a gold wedding ring called madiungara over the fourth finger of the bride's right hand, and the bride draws a second gold wedding ring over the fourth finger of the bridegroom's right hand. The bridegroom ties round the bride's neck the lucky thread or mangalsutra, which consists of a gold cup and some black glass beads strung together by a dancing girl. While the bridegroom is fastening the neck-thread, his mother leaves the house, for it is believed that by tying the wedding thread the luck in her mother-in-law's wedding thread passes to the bride.

The priest then kindles a sacred fire on the altar and clarified butter and parched grains or lája are thrown into the fire. The married couple walk thrice round the fire. A stone called ashma or the spirit is kept near the fire, and, at each turn, as the bride followed by the bridegroom draws near the stone, she stops and stands on the stone until the priest finishes repeating a sacred hymn. Next the small star in the tail of the Great Bear or Seven Seers, called Arundhati, is shown to them to bring them long life and prosperity. Seven heaps of rice are made on the altar and a beteingt is placed on each of the heaps. The priest repeats a verse and the bridegroom lifting the bride's right foot sets it on the first heap. The priest repeats another verse and the bridegroom lifting the bride's right foot sets it on the next heap, and this is repeated five times more. This ceremony is called saptapadi or the Seven Steps. When the seven steps have been taken, the marriage is complete. The priest blesses the married couple and two or more married women wave lighted lamps round the faces of the bride and bridegroom. A dinner is given and festivities are kept up for four days during which Brahmans are fed and presents are given. At these marriage dinners five or more plantain leaf dishes are served touching each other and the bride and bridegroom with their mothers and sisters sit close to each other and dine together. Before beginning to eat the bride's mother brings silver plates filled with wedding cakes and other dainties and serves them. However excellent the dishes, the bridegroom's mother is bound to keep grumbling. The dinner is

¹ Arundhati was the wife of Vashishth one of the seven great Hindu sages. The names of the other sages are Atri, Bharadvaj, Gautama, Kashyap, Vishvamitra, and Vamdev. All these have been defied by the Hindus and raised to the stars.

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poor, her share has been forgotten, and she is starving of hunger. On the fourth day three-cornered pieces of paper with flowers called bashing or brow-horns are tied to the brows of the bridegroom and bride. Wearing these marriage crowns they go to a temple, pay their devotions to the god, and return home. On the fourth night of the marriage the bridegroom dresses himself and about three in the morning runs off to his own house with some valuable article belonging to the bride's family. The bride's people go and bring him back. Next day the bride's mother richly dressed raises on her head a plate with red water, a pair of inch-high lamps and flowers, and carries it from the middle of the house to the god-room, and brings it back to the middle of the house. When she carries the water and lamps, her brother holds across her head a drawn sword with a lemon fixed in its point. This is called sindopa horong or carrying the red water plate. In return for performing this ceremony the bridegroom's mother presents the bride's mother with a robe and bodico. After the red water and lamp have been carried the bridegroom, his father and mother, and other members of his family, are . made to sit in a line. The bride's father brings a square basket, some red coloured liquid, and a bodice. For a few seconds, he seats the bride in the lap of each person in the row, holds the basket over the head of each person while the bride is sitting on his or her lap, and each time pours a little of the coloured water into the basket. Through the holes in the basket the coloured water drops on the heads of those over whom the basket is held. While he holds the basket the bride's father says in Sanskrit, 'I have cared for this girl like a son until she is eight years old; I now make her over to you for the use of your son (or brother). Guard her like a friend.' When the bride's father has finished addressing all he bursts into a loud cry, mourning that his daughter has passed out of his charge. Some fathers so thoroughly loose self-control that they have to be taken away by force. Then the bridegroom's party take the bride with them to their house with great rejoicing. On the fifth day the bride's party give a great feast called the mavani to Brahmans and to the bridegroom's party. On the sixth day, the bridegroom's party give a return feast to the bride's party called the mari mavani dinner. On the seventh day after the morning meal the bridegroom and his party set off for their village. In the evening of the same day Goudhalis are called and made to dance in honour of Amba Bhayani or some other family goddess.1 Dasara, Divali, and other feasts the bride's family sends for the bridegroom and gives him a rich dinner and a present of clothes. On other days the bridegroom's family does the same to the bride.

Coming of Age.

When a girl comes of age, friends and relations are told and the bridegroom's friends dronch him with red water. The girl is made to sit in an ornamental shed and three days are spent in rejoicing. During these three days the bride's friends and relations bring her presents of cooked food. On the fourth day all are entertained at a great dinner. On the fifth the bride is feasted at

¹ Details are given under the account of Gondhalgars.

the bridegroom's house and they retire together. This is called the phalashobhan or fruit-bearing. Next day the bride's father gives a grand entertainment, which is called the marindandala or the following day's entertainment. The bride's party go to their houses and the ceremony ends. Afterwards during each monthly sickness, the girl sits outside of the house or in the back-yard, and does not come into the house or touch any furniture or grain. Men and women, especially pious men and women, will not look at a woman during her monthly sickness. If they chance to see her or even to hear her voice they bathe, worship their gods, or take food. When all have dined some one takes food to the sick woman and leaves it in the outer shed or courtyard where the woman eats In the three days during which her sickness lasts, a woman is forbidden to bathe, change her clothes, or touch any one else, or even to speak with another woman in her courses. On the fourth day she bathes and comes into the house, but does not cook, go into the god-room, or touch any furniture or a child in arms. On the fifth day after anointing herself the woman is free to lead her ordinary life. After a woman becomes aged, which generally happens when she is about forty-eight, every year, on the bright fifth of Bhádrapad or September, a day known as Rishipanchami or the Seer's Fifth, she worships the seven sages that is the seven stars in the Great Bear. This ceremony makes a woman perfectly clean. She will not speak to a woman in her monthly sickness, or look at her or hear her voice or even hear her spoken of.

During the first and second months of a woman's first pregnancy nothing is done. In the third month she is secretly given a new green bodice and a good dinner. This is called chorcholi (M.) or kalla kusha (K.) that is the secret bodice. In the fourth month any food a woman longs for is given her, and in the fifth month a yellow robe and bodice are publicly given her, she is decked with buds not with blown flowers and feasted. Nothing is done in the sixth month. In the seventh month she is given a green robe and bodice and a good dinner. In the eighth month the ceremony of passing a thorn to the end of the braid of hair is held with much show. Nothing is done in the ninth month. On several occasions between the fifth and ninth months of a woman's pregnancy, she is anointed, ornamented, richly dressed, perfumed, and decked with flowers. ⁴ She is sometimes dressed like a Muhammadan woman, sometimes like a Lingáyat woman, and sometimes like a Márwári or Váni or some other caste woman. She is sometimes dressed in a red robe and a black bodice and feasted at six in the morning; in a black robe and a red bodice and feasted at noon; in a red gold-edged robe and yellow bodice and feasted in the evening; in a dark robe and white bodice and feasted at midnight; or in a white robe and a red bodice and feasted by moonlight.

When the sick is on the point of death, he is, if possible, shaved, if not, he is bathed and wiped dry. The sect-marks are painted

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¹ In the case of a woman who has had several children the seventh and eighth month ceremonies are dispensed with.

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with white earth or gopichandan and the body is stamped with the shrimudra seals, the chakra or discus and the shankle or conch-shell No saudal or redpowder brow-marks are put on. He is laid on a clean mattress which is spread near the door in the women's room or central hall on a spot which is cowdunged, and strewn with blades of the sacred darbh grass. When he is laid down he is made to sin a few drops of the panchagadvya or five cow-gifts, urine, dung milk, curds, and clarified butter. To take away his smaller size he is also made to give to Brahmans a cow and some money. The more deadly sins, murder, cow-killing, and spirit-drinking, cannot be cleansed. Some Brahmans sit by reading aloud some religious book, and relations repeat the name of the god Vishan in the dring man's cars. When life is gone, the women raise a cry, the body is washed, and the shrimudra marks are made on the forehead, arms. and chest. A bamboo and grass bier is made, two earthen pots are brought, and fire is consecrated and placed in one of the pot-The body is stripped of its clother and laid on the bier. A new cloth is brought and from one end a piece about two inches broad called the rasna or cloth is torn. This shroud-end is knotted in the middle and its ends are tied together and worn round the chief mourner's neck. The rest of the new cloth is wrapped road the body, and a cord is passed round the cloth, the body, and the bier to keep the whole together. When the bier is ready two stones are picked up, one of which is laid under part of the twine tied round the body, and the twine is cut with the other stone. The lower stone is thrown away and the upper stone is supposed to be possessed with the spirit of the dead. Then four bearers, over whom some hymns have been said, lift the bier on their shoulders. The chief mourner walks in front holding the earthen fire-pot and with the cloth or rasua tied round his neck. About half-way to the burning ground the bier is set down and the chief mourner drops into the dead mouth a few grains of sesamum and a few drops of water. The bearers change places these in front going behind and those behind coming in front, and in this way the bier is carried to the burning ground. At the burning ground three small holes are made in the ground and three small pieces of gold, a few sesamum seeds, and a few blades of the sacred durbh grass are put into the holes and over them the pile is raised. Camphor, sandalwood and perfumes are laid on the pile. body is placed on it with the head towards the south. hymns have been repeated by a Brahman priest, the son sets fire to the pile near the head, then near the legs, and lastly near the chest. He fills with water the second of the two carthen pots, which were bought soon after the death, makes a hole in the pot with the point of the life-stone, and taking the pot on his shoulder walks three times round the pile with his left hand towards it at each turn piercing a fresh hole. At the end of the third round he stands near the head of the corpse with his back towards it and his face towards the south and throws the pot over his shoulder on the ground. the pot smashes he strikes the back of his right hand on his mouth and cries aloud. The funeral party then return home. On their way the chief mourner thrice throws a stone back over his shoulder. If the deceased died on an unlucky day, with the

body are burnt four men of dough, one of which is placed near the head, the second and third near the hands, and the fourth near the feet. Children under three are generally buried. An ascetic, whatever his ago, is buried. The body is placed sitting in a pit, a large quantity of salt and mustard are thrown in, and the hole is filled. A holy layman, who is not an ascetic, but has kept the sacred fire always alight, is not carried on a bier, but placed on a cart decked with leaves and flowers, and drawn by men and bullocks to the burning ground and there burnt as in ordinary cases. the house of mourning, if the dead has left a son, on his return from the burning ground, the chief mourner, in the floor of the women's hall close to where the body was laid, digs a hole about a foot deep and keeps a lamp burning in the hole day and night for ten days. The shroud-strip or vasna and the life-stone are laid near the light. Close to the hole about a foot from the ground a nail is driven into the wall and two threads are let down from the nail into two small carthen vessels, the one with water the other with milk. During the next ten days, before he begins his meals, the chief mourner carries a morsel of cooked rice from his dish, and lays it before the life-stone, pours water on it, and throws the water on the house-top.

On the first, third, fifth, and seventh days after a death, the chief mourner fastens the shroud-strip or vasna round his neck, holds the life-stone in his right hand, and goes to the burning ground. The burnt bones are gathered from the ashes of the funeral pile, washed and purified by sprinkling cow's urine on them, and the whole of the ashes are thrown into a pond or other water. A hundred pots full of water are poured on the spot where the body was burnt, and then a three-cornered mound is raised. The chief mourner sits on the north side of the triangle with his face towards its base. The life-stone is set in the middle of the mound. second stone representing Rudra the destroyer is set in the eastern corner, and a third stone representing Yam the god of death is set in the western corner. Small earthen vessels about an inch high and three inches round with covers on them and large and small flags are set before the three stones. A few sesamum seeds, a few grains of yellow rice and gram, a cotton thread and a pair of dough shoes are laid before the three stones. This ceremony is called the asthi sanchayan shráddha or the bone-gathering coremony. The burnt bones are then put into an earthen pot, which is carried to some sacred river and thrown into it. From the first to the tenth day after the death the chief mourner goes out of the village to some temple or other clean place, with the shroud-strip or vasna round his neck and the life-stone in his hand and setting the life-stone on the ground, on the first third fifth seventh and ninth days, lays before it a ball of cooked rice or dough, some sesamum seeds, and some water, and returns home. On the tenth day the ceremony held on the bone-gathering day is repeated. On the eleventh day comes the vrishotsarga or bull-freeing ceremony, when the chief mourner holding the tail of a bull in his left hand, and water, sacred grass, and sesamum seed in his right hand, says 'I set this bull at liberty in the name of the deceased, may it savo him,' and throws the water, sacred grass, and sesamum seed on the Chapter III.

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Then comes the ekahi or first pure day sacrifice. After that funeral rites are performed in honour of the Vasugan or the band of Vasus, Rudragan or the band of Rudras, and Shodashagan or the band of sixteen deities. In honour of the Vasugan eight. in honour of the Rudragan eleven, and in honour of Shodashagan sixteen Brahmans are called, their feet are washed, they are fed. and money is given them. A man who cannot feed so many Brahmans lays eight, eleven, and sixteen pebbles in rows, sets a little rice and dough before them, bows before them, and throws them away. On the twelfth comes the sapind shraddh or the ball. uniting ceremony. Six Brahmans are asked to dine. Three round halls of boiled rice are made to represent the great-grandfather the grandfather, and the father of the dead; and a long oblong ball to represent the dead. Several hymns are repeated, the long ball is cut in three and each of the three parts is mixed into one of the three round balls as a sign that the dead has been gathered to his fathers. From this day the father, grandfather, and great-grandfather of the mourner are alone reckoned his immediate ancestors. His great-great-grandfather, by offering a ball of flour instead of rice called the heaven-opening or svarga pátheya, is raised from being one of the immediate ancestors. On the thirteenth the chief mourner performs certain religious ceremonies outside of the town and comes home. A pestle is set in the front yard, and he is made to sit on it with his back to the house, when some one of the family pours from behind oil and warm water over his head. He comes into the house, bathes, sips a few drops of the five cow-gifts, puts on a new thread, and worships Ganpati. When the worship of Ganpati is over, one of the married women of the family waves a one-wicked lamp round the chief mourner's face. The ceremony ends with a dinner to Brahmans. During the first thirteen days after a death the members of the family eat nothing sweet and do not worship their house gods. On the fourteenth sweet food is cooked and eaten by all. During the first year after a death in every month on the new-moon day, and on the lunar day on which the death happened, a memorial ceremony or mind-rite is held. After the first year during the lifetime of any son of the deceased the death-day is marked by keeping his anniversary every year in the dark half of Bhadrapad or September. For ungirt boys and unwed girls no mind-rifes or shraddhs are performed. The only ceremony in the case of an ascetic is on the first day. All Brahmans are careful to hold memorial services in honour of their parents and other family elders, as well as in honour of their more respected chief priests. The dark half of Bhadrapad or September-October by Brahmans called pakshamás or the spirit-month and by Maráthás mahál a corruption of mahalaya a sanctuary or place of refuge, is set apart for offering funeral cakes, balls, and water to the spirits of the dead. On the day in dark Bhádrapad which corresponds to a male parent's death-day, the mourner offers funeral balls, cakes, and water to the spirit of the dead and feeds two or more Brahmans. This is in addition to the memorial service on the yearly death-day. In the case of a mother or of female ancestors the death-day is alone observed. No service is held on the mahal that is the lunar day in

dark Bhádrapad which corresponds to the lunar day in which the death took place. Mothers and female ancestors who died before their husbands, besides the yearly death-day, are honoured with a special service on the dark ninth of Bhádrapad or September-October which is known as the avidhavánavami or the unwidowed ninth. On this day the chief mourner calls two or more Bráhmans and two or more widowed women, feeds them, and gives them clothes and money. Funeral balls, cakes, water, turmeric, and redpowder are offered to the spirit of the dead. On the fifteenth of dark Bhádrapad or September-October balls, cakes, and water are offered to the spirits of all the elders and two or more Bráhmans are fed. This is done by every Bráhman whose father is dead.

To find the proper day and hour for holding mind or mahál feasts, several puzzling calculations have to be made. The solar day begins at sunrise and ends at the next sunrise. This is not the case with lunar days. The time taken by the moon to go round the earth is divided into thirty tithis or lunar days. These days are numbered from one to fifteen during the first or bright half of the moon, and again from one to fifteen during the second or dark half of the moon. On account of the different positions of the moon with regard to the earth the length of the lunar days varies. At the same time for social and festival purposes the date of the lunar day or the age of the moon at sunrise on any solar day is held to be the lunar date of the day, though the lunar day may not actually begin till some time after sunrise. Thus if at sunrise on Sunday the first of January the lunar day was the bright fifth, though the sixth lunar day may begin within an hour after sunrise the whole day until sunrise on Monday, for social and festival purposes, is the bright fifth. The bright sixth begins with sunrise on Monday. If the sixth lunar day has been completed and the seventh has begun before sunrise on Monday, the sixth lunar day is dropped and Monday is called the bright seventh. On the other hand if, as happens about once a month, the same lunar day is running both at Sunday and Monday sunrise both of those days are counted as the bright fifth. This rule applies for social and festival but not for funeral purposes. For funeral purposes supposing sunrise on Sunday the 1st of January fell on the bright fifth of the moon and the bright sixth began at eight in the morning, if a man dies between sunrise and eight, he is held to have died on Sunday the bright fifth, and the bright fifth is his death-day. If he dies after eight his deathday is the bright sixth. Memorial services should be performed between 1-13 and 3-36 in the afternoon which is called the aparánhakál or afternoon time.¹ If the lunar death-day is not current but begins soon after and lasts till the next afternoon the service should be put off till the next afternoon. If, which rarely happens,

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¹The solar day is divided into five times or káls each six ghatkas of twenty-four minutes that is a space of two hours and twenty-four minutes. The first time from 6 to 8-24 A.M. is called prdtahkál or first time, the second time from 8-25 to 10-48 A.M. is sangámkál or joining time, the third time from 10-49 A.M. to 1-12 P.M. is maddhyanhalál or noon, the fourth time from 1-13 to 3-36 P.M. is aparánhakál or afternoon, and the fifth time from 3-37 to 6 P.M. siyankál or evening time.

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the lunar death day ends before the next afternoon the service should be held the day before. No service is held for an ascetic either on the corresponding lunar day of dark Bhádrapada or on All Saints' Day on the Bhádrapad no-moon. A layman's death-day is called his shraddh or anniversary day, the lunar day of dark Bhádrapada or September-October corresponding to his death-day is called his paksh or fortnightly day. An ascetic's death-day is called his punya tithi or holy-day. An ascetic's memorial rite must be performed during the afternoon of the solar day at whose sunise his lunar death-day was current.

A birth or a death makes a family impure for ten days. During the ten unclean days they perform no religious ceremonies, do not go into the god-room, or touch the furniture in the house, or any of their friends, or cook food. During those days men and widows make their brow-marks only of white earth and black charcoal without sandal-paste or redpowder. Married women use neither turmeric nor redpowder. Nothing sweet is caten. Should the death-days of their parents or other relations fall during the tendars of uncleanness, they are not kept, but they keep them on the day they become pure. So long as they are impure they neither give nor receive anything in charity, or study, or teach religious books. On the day they become pure, they bathe, sip a few drops of cow's urine, and eat sweets, and the men change their sacred thread. If a birth or death takes place in a family several degrees removed from the common ancestor, the impurity lasts only three days, a day and a half, or half a day according to the distance of the degree. If the relationship is very remote, they bathe on hearing the news of the death and are pure. If a person not related to the family in which a birth or death has taken place touches a person in mourning he baths and is pure. Until he bathes he can neither cat nor drink.

When Madhvas meet before meals one asks the other 'Are you up?'; the other answers 'I am, are you?' If Madhvas meet after the dinner hour one asks 'Have you dined?'; the other answers 'Yes, have you?'

In their houses young women are so closely guarded by mothers and sisters-in-law that they dare not speak even with female visitors. But when the young women go to draw water, they speak freely with their friends and tell other women all that goes on in their houses. They send messages to their parents, sisters, and brothers, without the knowledge of their husbands, mothers, or sisters-in-law and with a strict caution not to let their husband's people know. A Madhva, if he chooses, may marry the sister or sisters of his wife either during her life or after her death. On the other hand women are not allowed to marry their husbands' brothers, either during their first husband's life, or after his death. It is characteristic of the people of Dharwar, high castes and low castes alike, nover to give a straight answer but as far as possible to answer by a question. Thus to the question 'Have you seen Tukaram?' the usual answer takes the form of 'When did I see him?', 'Who told you that I saw him?', 'Why should I see him?', 'Did you tell me to see him?', 'How could I see him?'.

During Shráran or July-August parents of almost all classes ask their married daughters to their houses. The daughters spend a few days with their parents, are feasted, presented with a robe and a bodice, and sent back to their husbands.

Among Madhvas when a relation comes whom they have not met for long, he is given a good dinner, and presented with clothes and other articles and sweetmeats. Before presents of clothes are made the giver has always to mark the robe or the waisteloth with redpowder. No one will take the present of a cloth unless the giver has marked it with red. A woman who has lately been confined is presented with two bodices, one for the mother and the other for the child. Besides the second bodico the babe is presented with a small jacket, a cap, an armless cloak called kunchi, and 2s. (Re.1). To widows no bodice is given and no red marks are made on the robe. On all marriages, coming of age, and meetings after the birth of a child, in the chief woman's lap some rice and betel, a couple of plantains, and a cocoanut are laid, and she is given a bodice. This is called the vuditumbona or lap-filling. In spite of the Brahmans' dislike of Islam and of Muhammadans they lay sugar and fruit before the túbuts or miniature biers of Hasan and Husain in the yearly Moharam festival.

If a Bráhman dies, none of the Bráhmans of the same street can eat or drink till the body has been taken away. On the return from the burning ground, the house of mourning is often the scene of a confused struggle for a share in the presents.

When children got small-pox, chicken-pox, or measles, their parents sleep apart for nine days. At the end of the nine days, pitchers full of water are poured over the steps of the temple of Durgavva the goddess of cholera. Gram soaked in water, a cocoanut, a plantain, turmeric, and redpowder, and boiled rice mixed with curds garlic and onions, are laid before the goddess, and lighted camphor is waved round her. When any member of the family is suffering from fever or sore-eyes the married people sleep apart.

During the last ten or fifteen years the younger men have given up many old religious observances.² The women still keep to their Chapter III.

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¹ Perhaps from the want of any strong caste organization the Madhvas compare unfavourably with most classes in the matter of carrying the dead. They make the carrying of the dead a matter of hire instead of a token of respect and sympathy for the mourners. If a death happens in a poor family no neighbours are to be found. They hide or run off or refuse to answer if asked to help. The few who come demand 2x, to 8x. (Rs. 1-4) and will not lift the body till the money is paid. If the family is poor, lich neighbours have to help them to pay the bearers. Again, when a rich man diex, the priests struggle for a place as carriers, tempted by the hope of fees of £3 to £4 (Rs. 30-40) which are sometimes given.

² The following are some of the chief religious changes that have taken place among the younger men of the Middya sect. Most of the younger men do not change.

in the following are some of the chief religious changes that have taken place among the younger men of the Madhya seet. Alost of the younger men do not observe fasts and take their usual meals even on the Ekddashis or lunar elevenths of bright and dark Ashddh or July and Kartil or November which other Madhyas strictly observe as great fast days. The younger men do not apply any of the sectarian marks except the black line and red round paste mark to the brow. They do not mind if they do not get the holy-water to sip, and when Brahman priests are called to dine they do not ask the priests' permission to take their meals, but begin to eat whether the priest has begun to eat or not. Some of the young

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old practices. The Madhvas allow child marriage and polygamy, they forbid widow marriage, and polyandry is unknown.

The Madhyns are not bound together as a body. The sect includes many factions whose members settle their own social disputes. When a dispute goes before the chief priest or svámi, he fines one party and receives the amount of the fine as a present. He occasionally puts an offender out of the sect but the offender is generally allowed to come back if he pays a fine. During the last twenty years the power of the caste to enforce its rules has grown very weak. The power of the high priest to settle disputes is not questioned. But the high priest is on tour and the local priests pay more heed to gathering fees than to healing disputes.

Ten years ago Madhva priests never sent their boys to Government schools. Their parents or other relations taught them Sanskrit until they were sixteen to twenty years old. During the last ten years the practice of sending their boys to Government schools has become general. About one per cent have given up their priestly calling and taken to Government or private service, pleading, and moneylending. The laity have always been eager to send their boys to school. A few send their girls to school, but no girls stay

after they are nine or ten. They are a rising class.

Suart-Buagyats.

Sma'rt-Bha'gvats are found all over the district. speak Kánarese. The names in common use among men are Martandbhat, Rudrabhat, Virupákshabhat, Shankaráppa, and Sadáshivaráya; and among women Gangábái, Nágubái, and Párvatibái. They have no surnames. Their chief family-god is Shiv and their chief family-goddess is Párvati. A male Smárt Bráhman is recognized by the horizontal sandal-paste mark and a red dot on his forehead, by the cleanness of his loin and shouldercloths, and by his peculiar way of wearing them; and a woman by the horizontal red mark on her brow and the cleanness of her robe and bodice. They are generally fair and goodlooking. Most of them live in houses of the better class two or more storeys high with walls of brick and The houses are clean, neat, and well-cared for. keep one or two cats and sometimes cows and she-buffaloes. are great eaters and good cooks. Their daily food is rice, pulse. and vegetables, and their special holiday dishes are sweet cakes made of wheat, pulse, sugar, and clarified butter. They do not eat animal food except at great sacrifices when they are obliged to kill a sheep and offer its flesh to the god of fire. Most of them drink no liquor but a few who worship the goddess Durga on Friday nights offer her liquor and themselves sip about two tea-spoonfuls. The men wear the loin and shouldercloth, a jacket, a turban, and shoes, and a few wear sleeveless coats, stockings, boots, and neckties in imitation of the English. The women wear a robe and a bodice. The plain end of the robe is tied round the waist and knotted; the upper middle part is folded backwards and forwards about three inches broad and tucked in near the navel; the

men are not careful to keep their parents' death-days. On the anniversary day instead of performing the shráddh ceremony they feed a Bráhman, give him a money present or dakshina, and send him away.

lower middle part is passed back between the feet and tucked in at the waist behind; and the upper finer end is carried from the left side under the right arm and thrown over the left shoulder and head so as to cover the chest and allowed to fall loose on the right shoulder. The robe is arranged so neatly that the full border shows from below the right arm to the left shoulder and head. They mark their brows with redpowder or kunku, rub water and turmeric on their brows cheeks hands and feet, and tattoo small dots on their foreheads cheeks and chins, and flowers on their hands and feet. Both men and women are clean and neat in their dress. They have a good store of clothes for daily wear and for special occasions. The men wear gold ear and finger rings and necklaces, and the women wear gold ear, nose, and finger rings, armlets, bracelets, waistbands, and silver anklets and chains. They are hardworking, honest, hot-tempered, hospitable, and orderly. Most of the laymen are moneychangers, cotton and grain dealers, and Government servants; and most of the priests live by house service and alms-begging. They hold themselves equal in position to any local Brahmans. Strict Vaishnavs hold them inferior and will not take food from a Smart Bráhman, but especially of late years ordinary Vaishnavs eat and drink with them. A family of five spends about £1 10s. (Rs. 15) a month on food, and about £2 10s. (Rs 25) a year on dress. Their house goods are worth about £10 (Rs. 100). A birth costs about 10s. (Rs. 5), a thread-girding about £2 (Rs. 20), a marriage about £10 (Rs. 100), a coming of age about £1 (Rs. 10), a pregnancy about £1 (Rs. 10), and a death about £2 (Rs. 20). As a class they are religious. Their family deities are Párvatí and Shiv and they also worship Ganpati, Vishnu, and other Hindu gods. They keep the regular Hindu holidays, the chief of which are Holi-Hunavi in March-April, Ugadi in April-May, Ráma-navami in April-May, Nág-panchami in August-September, Ganesha-chaturthi in September-October, and Dasara and Diváli in October-November. They make pilgrimages to Benares, Gokarn, Pandharpur, Rameshvar, and Tirupati. Their spiritual guide is Shankaráchárya. They believe in sorcery, witchcraft, and soothsaying. The sorcerers, witches, and soothsayers belong to all classes, generally to the lower classes, and are consulted when a person falls sick or is overtaken by misfortune. The sorcerers remove the sickness or the ill-luck by the help of some familiar spirit. They keep the sixteen Brahmanic sacraments or sanskars2 and in their customs

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¹ These and other estimates of monthly cost of living are framed on the basis that the family has to buy retail the grain and other articles it uses. The actual cash payments of the bulk of the middle and lower orders who either grow grain or are wholly or partly paid in grain must therefore be considerably less than the estimates. The figures mentioned in the text are not more than rough estimates of the value of the articles which under ordinary circumstances the different classes of the people consume.

consume.

2 These are: Sacrifice on or before conception, garbhadhan; Sacrifice on the vitality of the feetus, punsavan; Sacrifice in the third month of pregnancy, anaralobhana; Sacrifice in the seventh month, Vishnubali; Sacrifice in the fourth, sixth, or eighth months, simantonnayan; Giving the infant honey and clarified butter out of a golden spoon before cutting the navel-cord, fatchan; Naming the child on the tenth, eleventh, twelfth, or hundred and first day, namalarm; Carrying the child to be presented to the moon on the third lunar day of the third bright fortnight

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and observances do not differ from Vaishnav Bráhmans. Child marriage and polygamy are practised, widow-marriage is forbidden, and polyandry is unknown. They are bound together as a body. Minor social disputes are settled by a majority of the caste and graver offences by their guru or spiritual teacher Shankaráchárya. Any one disobeying these decisions is put out of caste. Of late years the power of the community is said to have declined. They send their poys and girls to school. Their boys are kept at school till they can read and write and in some cases they are given a high education. The girls stay at school till they are nine or ten years old. At home they are taught to draw patterns in rángoli or quartz powder, and something of cooking and other housework. They do not take to new pursuits and are a steady class.

GOLARS.

Golaks, or Bastards, are returned as numbering five and as found in Godag. There are two divisions of Golaks, Kund Golaks and Rand Golaks. The illegitimate offspring of a Bráhman woman during her husband's lifetime is a Kund Golak and the children of a Bráhman widow are Rand Golaks. These people eat from Bráhmans. Other Bráhmans neither eat nor marry with them.

KANYAS.

Ka'nvas, also called Yajurvedi or Prátham Shákhi that is First Branch Brahmans, are returned as numbering about 1323 and as found in Dhárwár, Bankápur, Hángal, Karajgi, Kod, Navalgund, Ránebennur, and Ron. They are called Prátham Shákhis because they belong to the first branch of the white Yajurved which is called Kánya. They speak pure Kánarese. The names in common use among men are Govindbhat, Rámbhat, and Sakhárámbhat; and among women Gangábái, Jánakibái, and Rádhábái. Their family-god is Mailar, who is the same as the Deccan Malhari or Khandoba, and whose chief shrine is said to be at Premapur near Benares. are divided into Vaishnavs and Smarts. They have gotras or family stocks and a boy and girl of the same stock cannot intermarry. They are dark and stoutly made. Most of them live in houses of the better class one storey high with walls of brick and tiled roofs. Their daily food is rice, pulse, and vegetables; and their special holiday dishes are sweet cakes made of wheat, pulse, sugar, and clarified butter. They neither eat animal food nor drink liquor. In dress and ornaments they do not differ from Smart Brahmans. They are hot-tempered, hospitable, and orderly, but neither hardworking, clean, They are priests, cotton and grain dealers, and moneynor neat. Some are employed as cooks and water-carriers and a few as Government servants. In social position they rank with Smart Brahmans. A family of five spends about £1 10s. (Rs. 15) a month on food and about £3 (Rs. 30) a year on clothes. A house costs them about £30 (Rs. 300) to build and 4s. (Rs. 2) a month to A birth costs about £2 10s. (Rs. 25), a thread-girding about

nishkraman; Carrying the child to be presented to the sun in the third or fourth month, suryavalolan; Feeding the child with rice in the sixth or eighth month, annaprashan; Tonsure in the second or third year, chuddharm; Investiture with the sacred thread, upanayan; Instruction in the Gdyatri verse after the thread ceremony, mahandmya; Loosening of the muni grass and preparing the boy for his marriage, samdvartan; Marriage viviha; and Death svargárohan.

£5 (Rs. 50), a marriage about £20 (Rs. 200), a girl's coming of ago about £2 (Rs. 20), a pregnancy about £1 (Rs. 10), and a death about £4 (Rs. 40). As a class they are religious. In their houses they worship stone images of Shiv, Vishnu, Ganpati, Surya, and Shakti. Their family god Mailar or Malhari is represented as an old man with a long beard holding in his hand a triskul or trident and smoking a hubble-bubble. His forehead is smeared with turmeric powder, he rides a horse and is accompanied by his mistress Kurabatteva a woman of the shepherd caste, and several dogs. The chief local shrine of this god is at Gudguddapur in Rauebennur. Besides the figures of this god the Gudguddapur temple contains a figure of his minister Heg Pradhani who is said to be an incarnation of Vishnu, and another of the lady Kurabatteva. The templealso contains figures of dogs. Several beggars live in the temple and dress themselves with cotton and woollen rags and call themselves Vaggayas or dogs of the god. They bark at each other like dogs and in return are given alms. Great merit accrues from feeding these human dogs. Kánvas keep the leading Hindu holidays and make pilgrimages to Vithoba at Pandharpur, Mahálak-hmi at Kolhápur, Venkataraman at Tirupati, and Vishveshvar at Benares. They say that their forefather's teacher was the sage Yadnyavalkya, but they have no spiritual guide or guru. They keep the sixteen sanskars or sacraments according to the rules of the white Yajurved. Their customs and rites do not differ from those of Smart Brahmans. Child-marriage and polygamy are allowed, widow-marriage and divorce are forbidden, and polyandry is unknown. They are bound together as a body. disputes are settled by men of the caste and any one disobeying the common decision is put out of caste. They send their boys and girls to school, do not take to new pursuits, and are a steady class.

Kanoj or Upper India Bráhmans are returned as numbering about 290 and as found in Dhárwár, Bankápur, Hubli, Karajgi, and Navalgund. They take their name from Kanoj in North India. They claim to belong to the Angiras, Bathaspatya, Bharadvaj, and Vashishth gotras or family-stocks. The names in common uso among men are Bálprasád, Bhavadiga, Devidin, Deviprasád, Gopináth, Jagannáth, and Shankarprasád; and among women Jamuna, Jánki, Luchhimi, and Sundar. Their common surnames are Agnihotri, Bachape, Bál, Chaube, Dikshit, Kibe, Páthak, Shákta, and Trivedi. Persons having the same surnames cannot intermarry. They speak the Brij language at home and Hindustani and impure Kanarese out of doors. They are stronger and stouter than the local Deshasths. They live in houses of the better class with walls of brick or stone and tiled roofs. They are moderate enters. Their staple food is rice, wheat cakes, vegetables, and clarified butter. They do not use flesh or intoxicating drinks. The men wear a waistcloth, a coat, a shouldercloth, a turban, and shoes; and the women wear a petticoat and robe and a backless bodice called káchli. Both men and women keep rich clothes in store for holiday wear. The Kanojs are generally clean, hardworking, and sober, but vain and Chapter III.
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Details are given under Gudguddapur in Places of Interest.

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Their main calling is service as soldiers and fond of show. messengers. Some have taken to husbandry and some to moneychanging. They are religious, having priests belonging to their own caste, and making pilgrimages to Benares and Allahabad. They keep the leading Hindu holidays and believe in sorcery, witchcraft, and soothsaying. When a woman is in labour a midwife is called and cuts the navel cord. The child is made to suck honey for the first three days. On the sixth day the women of the house wash their hands in a mixture of turmeric water and redpowder, and press them five times against the walls of the lying-in room. In front of these hand-marks a golden image of Satvai is set on a stone, with a sheet of blank paper, a reed pen, and a pomegranate, and it is worshipped by the women of the house with flowers and red powder. The impurity caused by a birth lasts ten days. Boys are girt with the sacred thread between seven and ten. On a day fixed as lucky by an astrologer the boy is shaved and for the last time eats from his mother's plate sitting on her lap. The boy and his father are made to stand on a low wooden stool facing each other, with a cloth drawn between them. The priest repeats sacred verses, the guests throw red rice, and the cloth is withdrawn. The priest gives the boy a sacred thread to wear. The father seats the boy on his lap and whispers into his right ear the holy sun-hymn or gáyatri, and the priest kindles a sacred fire. A feast is given to Brahmans friends and kinspeople, and the ceremony is over. Boys are married between fifteen and thirty, and girls beween five and fifteen. On a lucky day the boy dressed in a fine suit of clothes with a marriage coronet tied to his brow, goes in procession with his friends and kinspeople with music, to the bride's. On reaching the bride's the bridegroom is taken into the marriage-hall and the bride is made to stand in front of him. A curtain is held between them, and the priest repeats marriage songsand throws rice grains over the couple. The priest kindles the sacred fire, and the bride and bridegroom throw clarified butter and fried rice into it. They walk six times round the fire. At the end of the sixth turn the bride goes into the house, and with tears in her eyes takes leave of her home. When she comes out her father mentions his own and the bridegroom's family-stock or gotra, and the bridegroom, after asking leave of the guests, takes the seventh turn round the fire followed by the bride. Next day a feast is given to friends and relations and the marriage is over. When a girl comes of age she is unclean for four days. On the sixth day she and her husband are bathed together, and the family-priest kindles a sacred fire and pours clarified butter and sessmum-seed over it. The girls's lap is filled with a cocoanut, plantains, dates, almonds, and sweatmeets, some bent grass is pounded, and her husband squeezes a few drops of the juice down the girl's right nostril, and friends and relations are feasted on wheat-cakes and cards. Any time after this the boy and girl may begin to live together as husband and wife. After death the body is bathed in cold water and The body is carried on the shoulders of four laid on a bier. castemen and the chief mourner walks before them carrying a fire-pot in his hand. On their way the bearers set down the bier, change

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KONKANASTHS.

Nánásáheb Peshwa in 1753. In appearance they are fuir and slender. Their expression is lively, the eyes large and often gray, the face oval, the nose high, the lips thin, the cheek-bones low, the checks round, the head hair long with a ruddy tint, and the face hair thick. Most of the women have weak eyes. They speak Maráthi at home. and impure Kanarese with the people of the district. They live in houses one storey high with walls of brick and tiled or flat roofs. They are great eaters and good cooks. Their daily food is rice. pulse, clarified butter, buttermilk, and vegetables, and their special holiday dishes are sweet cakes made of wheat flour sugar and spices. Their exceeding fondness for spiced and boiled buttermilk has given them the name of buttermilk-men kadhi (M.) or paldias (K.). They eat no animal food except at great sacrifices when they offer a sheep to the god of fire, and eat part of the offering. They drink no liquor. The men wear loin and shoulderoloths, a jacket, a coat, a headscarf or a turban, and shoes; and the women a robe and a bodice. They are thrifty, crafty, and persevering, cringing if a favour has to be gained, proud and overweening when in power. Some are landowners, others are traders, and a large number are in Government service. They are prosperous and successful. They claim equality with Deshasths, but the Deshasths do not admit their claim. As a rule the Dhárwár Deshasths, especially those of the Madhva sect, do not eat from the hands of Chitpavans. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs about £50 (Rs. 500) to build and about 4s. (Rs. 2) a month to rent. The furniture is worth about £20 (Rs. 200), and their servants and animals cost them about £10 (Rs. 100) a year. A birth costs about £1 (Rs. 10), a thread-girding about £3 (Rs. 30), a marriage about £20 (Rs. 200), a girl's coming of age about £1 (Rs. 10), a pregnancy about £1 10s. (Rs. 15), and a death about £2 10s. (Rs. 25). As a class they are religious. They keep the sixteen Hindu sanskárs or sacraments, and their customs and rites differ little from those of the Smarts. Their caste feeling is strong but among the younger members it is declining. Social disputes are settled by their guru or spiritual guide Shankaráchárya whose local representative lives at Sankeshvar in Belgaum. Any one disobeying the teacher's decision is put out of caste. They send their boys and girls to school, take to new pursuits, and are a rising class.

SARVARIAS.

Sarvarias are returned as numbering about fifteen, and as found only in Dhárwár. Their ancestors belonged to Upper India and are said to have settled in Dhárwár about seventy-five years ago. They speak Hindustáni at home and Kánarese abroad. The names in common use among men are Rámprasád, Shivlálprasád, and Venkatprasád; and among women Gangábái, Jamnábái, and Tulsábái. They have no surnames. Their household gods are Mahádev and Ganpati; and their household goddesses Yallamma and Lakshmi. Yallamma's chief shrine is near Savadatti in Belgaum, and Lakshmi's is in Kolhápur. They have no divisions.

¹ A detailed account of the Chitpáyans is given in the Statistical Account of Poena, Bombay Gazetteer, XVII. 98.158.

They are strong, stout, and commanding. They live in houses of sunburnt bricks and tiled roofs, generally one-storeyed, clean, and well-cared-for. They are moderate eaters and good cooks. daily food is rice, wheat-bread, vegetables, milk, curds, and clarified butter; and their special holiday dishes are sweet cakes made of wheat-flour, coarse sugar, and pulse. They neither eat flesh nor drink liquor. The men wear the loin and shouldercloths, a jacket, a coat falling to the knees, a headscarf, and shoes. The women wear a robe and a bodice, but do not pass the skirt of the robe back between their feet. Both men and women are neat and clean in their dress. Their widows do not shave their heads like other Brahman widows. The men wear carrings made of gold and set with pearls and gold finger rings; and the women wear ear finger and nose rings, armlets, wristlets, necklaces, and waistbands. They are honest, clean, neat, hardworking, and hospitable, but hot-tempered and quarrelsome. Many are landholders and traders, some are Government servants, and a few are priests. They rank among Gaud Brahmans. A family of five spends about £1 10s. (Rs. 15) a month on food and about £2 10s. (Rs. 25) a year on dress. A house costs about £20 (Rs. 200) to build, and about 2s. (Re. 1) a month to rent, and the value of their house goods is about £10 (Rs. 100). A birth costs about £2 (Rs. 20), a thread-girding about £3 (Rs. 30), a boy's marriage about £20 (Rs. 200), a girl's coming of age about £1 12s. (Rs. 16), a pregnancy about £1 (Rs. 10), and a death about £1 10s. (Rs. 15). A daughter's marriage costs more than a son's because £5 (Rs. 50) have to be paid to the bridegroom. They are religious, and make pilgrimages to Gokarn in Kanara, Benares in Upper India, and Rámeshvar in Southern India. Their spiritual teacher or guru is called Dandisvámi and lives near Benares. He is a Gaud Bráhman and has several Gaud Brahman deputies in different parts of the country. The Sarvarias believe in sorcery, witchcraft, and soothsaying. They keep the sixteen Hindu sanskars or sacraments. Child-marriage and polygamy are allowed, widow-marriage is forbidden, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by the members

a steady class.

Savva'ses, or a Hundred and Twenty-fivers, are returned as numbering about eighty-four and as found in Hángal and Karajgi. They say that the founder of their class was called Sahavási or companion, because he attended Rám the hero of the Rámayan in his exile. According to the common story they are called Savváses, literally one hundred and twenty-fivers, because their forefathers belonged to a band of hundred and twenty-five Bráhman families who lost caste by eating with a Bráhman who married a Chámbhár girl. The only Bráhmans who eat in the same row as the Savváses are the Bráhmans of Rághavendra Svámi's house who are their religious teachers. Their home speech, names, and house-gods are the same as those of the Mádhva Vaishnav Bráhmans to which community they formerly belonged. They have no surnames. They

of the caste and the local deputy of their guru or spiritual teacher. Any one who disobeys these decisions is put out of caste. They send their boys and girls to school, take to new pursuits, and are

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Savváses.

Chapter III, Population, Brinnans. are divided into Vaishnavs and Smarts who eat together and intermarry. In appearance dress and ornaments they do not differ from Madhva Brahmans. They are clean, neat, hardworking, perservering, hot-tempered, hospitable, and orderly. Their main calling is trade and moneychanging. As a class they are prosperous. Their customs and religious rites and ceremonies do not differ from those of the Madhva Vaishnav Brahmans. They send their boys and girls to school, take to new pursuits, and on the whole are a rising class.

SHENVIS.

Shenvis, also called Sárasvats or inhabitants of the country near the Sarasyati river, are returned as numbering about 430 and as found chiefly in Dhárwár, Bankápur, Gadag, Hubli, and Navalgund. Their original West Indian settlement seems to have been Goa whence many of them are said to have fled to Kanara, Belgaum. and Dharwar early in the sixteenth century when Goa fell to the Portuguese. The names in common use among men are Anappa, Durgáppa, Mangáppa, Shántárám, and Vaikunth; and among women Godu, Ganga, Shanta, and Yamna. Their common surnames are Bhándáre, Bichu, Kánvinde, Kulkarni, Rege, and Telang. Their leading family stocks are Atri, Bháradváj, Gautam, Jamdagnya, Kanshik, Vashishth, Vatsa, and Vishvamitra. Their family deities are Mangesh and Shanta-Durga. In appearance they are middlesized, fair, and well-made. Their women are handsome and graceful. and like the women of Goa are fond of decking their hair with flowers. Both men and women speak Maráthi and occasionally Kánarese. At home they speak the Konkani dialect of Maráthi. They live in houses one or two storeys high with walls of bricks, stones, and tiled roofs. Many of them eat fish and keep to rice as their daily food. As a class they are well-to-do; some of them are moneychangers, some village accountants, some Government or merchants' clerks, and a few are husbandmen. In religious matters Shenvis are either Smarts or Vaishnavs each sect being under the jurisdiction of a separate sanyási or head priest called svámi or lord. The Smárt svámi lives at Sonavda in Goa and the Vaishnav svámi in Goa. The two sects dine together and intermarry. The Shenvis are generally fond of show and somewhat extravagant, but intelligent, hardworking, and orderly. Their customs and religious rites do not differ from those of their brethren in Kánara and Belgaum. Social disputes are settled by the men of the caste, the graver cases being referred to their sramis or religious heads for disposal. They send their children to school, take to new pursuits, and appear to be a rising class.

Shriyaishnays.

Shrivaishnavs, or Rámánuja Bráhmans, are returned as numbering thirteen. They are found in large numbers in Maisur and Madras. They speak Tamil at home and Kánarese abroad. The names in common use among men are Bhaskaráchárya Rámánujáchárya, Sheshádriáchárya, and Tirmaláchárya; and among women Andalamma, Kámakshema, Minakshema, and Rukhminiamma. They have no surnames. They have many gotras or family stocks, and persons of the same gotra do not intermarry. They are divided into Vadagales whose sect-mark is a half circle of white earth with a straight line of yellow in the middle, and Tengales whose

mark is trident-shaped. Shrivaishnavs are well-made, fair, strong, and muscular. Most live in good one-storey houses with walls of brick and flat or tiled roofs. They are great caters and good cooks. Their daily and holiday food is the same as that of the Madhva Vaishnav Brahmans, the only difference being that they use more tamarind, chillies, and salt. They are famous for their skill in preparing a sweet dish called chitranna or variegated food. Rice is boiled and spread on a flat stone or a tinned plate, sweet oil is poured over the rice, and it is left to cool. Oil, mixed with powdered mustard seed and chillies, is poured into an iron pan and heated. To this, when hot, tamarind juice is added, and the whole is allowed to boil till it slightly thickens. When it begins to thicken rice, salt, sesamum powder, cocoa scrapings, and ground mustardseed are added and the whole is seasoned. Shrivaishnays make this food into small bundles and carry a supply of bundles when they go travelling. When they halt, they bathe, perform the daily worship, and eat the food. In dress the men do not differ from other Vaisnav Bráhmans. The women wear a robe and a bodice, but except the widows they do not cover their heads with the end of their robes. Their ornaments do not differ from those of other Vaishnav Brahmans. They are hardworking, clean, neat, thrifty, even-tempered, hospitable, and orderly. They are generally traders or moneychangers, and Government or private servants. They are successful and free from debt. As a caste they are on a par with Deshasths. They eat and meet socially on an equal footing with the persons of their own class but do not eat from the hands of other Brahmans. A family of five spends about £2 (Rs. 20) a month on food and about £5 (Rs. 50) a year on dress. It costs them about £40 (Rs. 400) to build and about 4s. (Rs. 2) a month to rent a house. Their house goods are worth about £20 (Rs. 200). A birth costs about £2 10s. (Rs. 25), a thread-girding about £5 (Rs. 50), a marriage about £20 (Rs. 200), a coming of age about £2 (Rs. 20), a pregnancy about £1 (Rs. 10), and a death about £3 (Rs. 30). They are religious. Their chief deity is Vishnu. They have family priests who are called Vadyars. There are two gurus or spiritual guides among them named Ahobalasvámi and Parkalasvámi. The former lives at Ahobal in the Madras Presidency and the latter in Maisur. Both the teachers travel about the country and brand their disciples with copper scals called the chakra or discus on the right arm and the shankh or couch on the left arm. Their chief holidays are Makar-Sankránt in January-February, Ugádi in April-May, Rám-návami in April-May, Narsinh-jayanti in May-June, and Krishnajayanti in August-September. They keep no holidays or festivals in honour of Shiv. They believe in sorcery, witchcraft, and soothsaying. Except for a few sectarian peculiarities their observance of the sixteen sanskars or sacraments does not differ from that of the Vaishnav Brahmans. Some of their customs seem strange to other Brahmans. Other Brahmans shave the moustache only on a parent's death. The Shrivaishnavs shave the moustache during their parent's lifetime because they hold that if water touches the moustache in passing into the mouth it becomes the same as liquor. At meals other Brahmans as a rule serve solt first, but among the

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Tengale Shrivaishnavs sugar and not salt is served first. Among Shrivaishnavs it is considered essential that a man should give a portion of his food to his wife, for this reason every married man leaves a portion of his food on his plate for his wife, and his wife takes her meals on the same plate adding fresh food to her husband's leavings. Shrivaishnavs consider glass bangles impure and their women do not wear thom after coming of age. They hold that a woman is likely to sicken any time after the eighteenth day since her last monthly sickness, and so after that day they do not allow her to cook. Other Brahmans do not wear shoes after they have bathed and before they have said their sandhya or daily prayer. Shrivaishnavs have no objection to wearing shoes after bathing provided they are sewn with leather not with cotton thread Shrivaishnavs are bound by a strong caste feeling. Their social disputes are settled by their spiritual teachers or gurus, and any one who disobeys these decisions is either put out of caste or fined They send their boys to school, seldom take to new pursuits, and are a rising class.

TAILANGS.

Tailangs, or Telugu Brahmans, are returned as numbering about 250 and as found all over the district except in Bankapur and Navalgund. They include five sections, Kusalnadu. Murikinadu, Telaganya, Vagnadu, and Velnadu, who eat together but do not intermarry. They have several family stocks, as Atri. Bháradváj, Gautam, Jamadagni, and Káshyap. The names in common use among mon are Bhimayya, Ramayya, and Somayya; and among women Gangamma, Nagamma, and Singamma. Their surnames are Bhamidivaru, Gantigunipadivaru, Innuvaru, Kampuraru. and Kotavaru. They are tall strong and dark. Their home tongue is Telugu, but with the people of the district they speak impure Kanarese. They are great caters, and have a special fondness for sour dishes. Their daily food is rice, whey, and vegetables. The men wear a short waistcloth, a waistcoat, a shouldercloth, a headscarf, and sometimes shoes; and the women wear a robe and a bodice and pass the skirt of the robe between the feet and tack it behind, They are clean, idle, quarrelsome, hot-tempered, and thrifty. They are religious and keep the usual Hindu fasts and feasts. Their spiritual teacher is Shankaráchárya. They believe in sorcery, witchcraft, and soothsaying. When a child is born the midwife cuts the navel cord and the child is bathed. The navel cord is not buried but is laid to dry in the lying-in room. On the afternoon of the fifth day in the mother's room a grindstone is laid on the floor and on the stone is set an image of Satvái and the child's navel cord, and they are worshipped by the midwife or other elderly woman. The family is impure for ten days. On the eleventh the members are cleansed by drinking cow's urine. Boys are girt with the sacred thread between seven and eleven. The day before the girding an invitation is sent to the village-god with music. On the threadgirding day a sacred fire is kindled and a sacred thread is fastened round the boy's neck and his right arm. Girls are married between six and ten, and boys between twelve and twenty-five. On the marriage day the devapratishtha or marriage guardian's enshrining

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BRAHMANS,
TAILANGS.

takes place at the houses both of the bride and the bridegroom. bride and bridegroom are rubbed with turmeric and bathed at their The bridegroom is carried on horseback to the girl's in procession with music and the boy and the girl are made to stand on low stools facing each other. A piece of yellow cloth is held between them, marriage verses are repeated, and a sacred fire is kindled. A turban is presented to the girl's brother, and betelnuts and leaves are handed to relations and friends. On the second and third day, the boy's relations are taken to dine at the girl's house, and on the fourth day the sade or robe ceremony is performed when the boy's relations go to the girl's house and present the girl with ornaments and clothes. The dead body is washed, dressed in a white sheet, and carried to the burning ground by four persons on a bamboo bier. On approaching the burning ground, the bier is lowered and a stone called ashma or life-stone is picked up. At the burning ground the body is laid on the pyre and burnt. When the body is burnt the chief mourner takes an earthen pot filled with water on his shoulder, and walks thrice round the pyre. At each round a hole is made in the pot with the stone called ashma, and at the end of the third round the pot is dashed on the ground. The ashes are thrown into water and all return home. From the third to the ninth day a rice ball is offered to the dead. On the tenth day all the adult males of the family go to a river, offer cakes and rice balls, set up red flags six inches high, and ask the crows to touch a rice ball. As soon as a crow touches the ball the mourners pour water and sesamum-seed over the life-stone or ashma and throw it into water. On the eleventh day the family is purified. A sacred fire is kindled in the burning ground and money is distributed among beggars. On the thirteenth day the shraddh ceremony is performed and this is repeated at the end of each month for a year. Social disputes are settled by men of their own caste, and any one who disobeys the common decision is put out of caste. They send their boys to school, seldom take to new pursuits, and on the whole are prosperous. Tirguls, or Betel-vine Brahmans, are returned as numbering

about 276, and as found only in Kod. They grow the betel-vine and are said to have lost position because in growing the betel-vine they are forced to kill insects. They were originally Deshasth Brahmans, but Deshasth Brahmans neither eat nor marry with The names in common use among men are Atmaram, Martand, Raghunath, and Shankar; and among women Lakshmi, Rádha, and Sávitri. Their surnames are Arankele, Arole, Blunge, Javalkar, and Supekar. They live in houses of the better class. Their daily food is rice, wheat-bread, vegetables, curds, and clarified butter. They use neither flesh nor liquor. Both men and women dress like Deshasth Brahmans. They are traders, writers, landowners, and betel-vine growers. They are hospitable, thrifty, clean, and hardworking. A family of five spends about £1 10s. (Its. 15) a month on food. They are Smarts, and worship all the Brahmanic gods and goddesses, and keep the ordinary Hindu fasts and feasts. Their customs do not differ from Deshasth customs. They send their boys to school and on the whole are a rising class.

Tinguls.

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Population.
Lingarats.

Linga'yats, properly Lingavants or Ling-wearers, are found all over the district with a strength probably of not less than 300,000 or 38.47 per cent of the district Hindus. Lingayats are called Vir or Fighting Shaivs as opposed to Smarts or Lukevarm Shaivs.1 They belong to two main divisions, laymen and clergy. The clorgy, who are generally called Jangams, are divided into two classes the Dhatasthalas or Viraktas who are unmarried and the Gurusthalas who are married. The thirty-one divisions of lay Linguyats may be arranged under three groups, four classes of True or Pure Lingayats, sixteen classes of Affiliated Linguyats, and eleven classes of Half-Lingávats. The four classes of True or Original Lingávats are Dhulpávads, Shilvants, Banjigs, and Panchamsális. Dhulpávads or Dust-Purified are considered the purest section of the Lingayat laity. They are very religious and do not eat with any other section except when a chief priest is present. So strict are they that even the firewood and cowdung cakes with which their food is cooked have to be washed before they are used. When they bring water from a public well, pond, or river, they are careful to cover the mouth of the water-vessel with cloth that neither the sun's rays nor a passing evil eye may defile the water. Many of them, apparently because the sun shines on streams and pools, draw their water from a hole dug in the river-bed sand, and close the hole as soon as they have filled their jars. The Shilvants or Pious are also strict though less scrupulous than the Dhulpavads. Next in purity and religious strictness come the Banjigs or Traders. Last come the Panchamsalis, ordinary Lingayats who are not generally careful to keep their religious rules. The group of sixteen classes of Affiliated Lingdynts are generally known by the name of their calling or occupation and do not hold so high a religious or social position as the four main classes. It is not easy to say whether they are off-hoots from the original classes whose calling or practices have in some way taken from their religious purity, or whether they are classes who adopted the Lingayat faith after the original members of the sect ceased to allow now-comers to enter on terms of equality. second explanation is probably correct. The third group of eleven classes of Half-Lingayats, in allowing their girls to remain unmarried after they come of age, and in their slight regard for ceremonial purity, lean towards, or perhaps explain the origin of the Lingayat book rules against child-marriage and ceremonial purity. They also prefer Jangams as priests to Brahmans, especially to perform their funeral rites. A love of flesh and liquor in many cases seems to have hindered them from becoming proper Lingayats. An account of each of the Affiliated and Hulf-Lingayats is given under its. caste name. The details are:

¹ Mr. Rice (Mysore, I. 383) says, those who adopt the extreme views of the sect are called Vir Shaivs or warrior Shaivs to show their polemical real. According to Brown (Madras Journal of Literature and Science, XI, 175) the Vir Shaivs were formerly warlike. Even since the beginning of British rule they have twice raised insurrections at Kittur (1829) and at Mangdler (1837).

Duárwár Lingávats, 1881.

Divisios.		Malca.	Females. Total		Divisios.			Males.	l'unales	Total.
Pure Lingdyata Ayyas or Janguns Bunjigs		19,681 10,745	10,435 11,012	21,787	Naglika Niliria Patta Silla			1054 250 110	1124 212 130	2178 408 240
Dhulp4vade Panch una-flis.		67,870	07,078	1767 195,857	Shir shimpigfo	rs * Total	••	14,110		
Shilvants Total	•	490	92,651	1071	Half-Lings	dyats.	••	14,110	15,950	30,075
Afiliated Langlya	ts.	17,444	P2,031	107,013	Aguarus or P	٠		421	459	128
Adibunjigara	:	4402 About	430G 2000	8793 2000	Devangs Dhors Hastire	•	:	2706 253 18	2501 240 18	5 97 403 36
Bile I dars † Chelvadis Ganigios *	:	1533	1500	3123	Hgerus Kurubur Guru	15 f	••	605	613	1250
Garles	:	 650	577 877	 1716	Nadigire * Sidare Fimagire		:	21,0°0 1270	21,466	43,422 2545
Kudayakaligirs Kumbhir		43:0	4145	8505	eilie	•••	•	1077	1003	2050
Lokábálikis Malavars Mathipatis	•	1321	1431	2752 224		Total	•	25,318	27,788	66,100
Statulatia	•	21	15	EG	Grand 7	rotal	•	141,851	113,708	25,279

^{*}These castes are not shown separately in the census returns but are included in the Brahman indu castes of the same name. †These castes are not shown in the census returns. Hindu castes of the same name.

Lingáyats say that the ling which they wear and worship is the oldest object of worship in India; that they are descended from the five mouths of Shiv named Aghora, Ishana, Sajjojata, Tatpurush, and Vainder; and that the practice of wearing the ling was introduced by Basav (A.D. 1100-1160) an incarnation of Nandi Shiv's bull, who reformed the Lingayat religion and revived the worship of the ling. There seems little reason to doubt that the Lingayats are right in describing Basav as the reviver of an old form of worship rather than the founder of a new faith.

Basavi was the son of Madiga Raya, also called Mandenga Madamantri, and his wife Madevi, also called Madala arasu and Mahamba, Aradhya2 Brahmans of Hingaleshvaram, a village near Bágevádi about forty miles south-east of Bijápur. They were devout worshippers of Shiv, and in reward for their piety Nandi Shiv's bull was born in their house, and, as the word Basav in Kánarese means a bull, the child was called Basav. It is said that when, as a boy, he was being girt with the sacred thread, Basav refused to wear it because it entailed the repeating of the gayatri or sunhymn. He said he would have no guru or teacher but Ishvar or Shiv. For this offence Basav's father drove him from his house. Basav's sister Akka Nágamma, also called Padmávati, fled with him, and they made their way to Kalyan about a hundred miles west of Haidarabad, then (A.D. 1156) the capital of the country

and Fleet's Kanares Dynasties, 60-61.

Aradhyas are Vir Shaiv Brahmans (Brown in Madras Journal, XI. 144). The word means reverend. They are supposed to have joined the Lingayats from personal liking to Basav. Jaugams do not eat with them because they say the gdyatri or sunhymn. In Madras they are bound to attend Lingayat funerals. Ditto, 147.

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¹ Basav's name is also written Basava, Basavanna, and Basavappa. (Wilson's McKenzie Collection, 2nd Ed. 305). In Madras he is also called Allama (Brown in Madras Journal of Literature and Science, XI. 161). The details of Basav's life and doctrines are taken from Wilson's McKenzie Collection, 2nd Edition, 305-307; Madras Journal of Literature and Science, XI. 141-147; Rice's Mysore and Coorg, I. 210-211;

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Population.
Lingdyats.

and the seat of Bijjal, a Jain king of the Kalachurya or Kalachuri dynasty (1156-1182). Basav's maternal uncle, who was minister of police or dándanáyak at Kalyan, sheltered Basav in his house, appointed him to a post in the service of the state, and gave him his daughter Gangamma in marriage. Basav improved his fortunes by giving his sister in marriage to the king. When his uncle died the king appointed Basav chief minister and general. Basny made use of his power to dismiss the old state officers and put friends of his own in their places. He spent his wealth in lavish charities and endeared himself to the mass of the people. When he thought his influence established, he began, in opposition to the doctrines of the Jains, the Smarts, and the Vaishnavs, to preach a religion whose adoration for the ling, dislike of Brahmans, and contempt for child marriage and ceremonial impurity revived the early or southern beliefs of the lower classes of the people. At the same time by forbidding flesh and liquor he sought to win over the Jains. At last, Bijjal, either enraged at Basay's conduct or stirred on by the Jains, attempted to seize him. Basav escaped, routed a party sent in pursuit, gathered a large body of friends and adherents, and, when Bijjal advanced in person to quell the rebellion, defeated him and forced Bijjal to restore him to his post of minister and general. According to Jain accounts, when he was restored to power, Basav determined to take the king's life, and finally poisoned him on the banks of the Bhima while returning from a successful expedition against the Siláhára king of Kolhápur. According to Jain accounts Raya Murári, the king's son, resolved to avenge his father's death. Basav, hearing of his approach, lost heart, and fled to Ulvi in North Kannra about twenty miles south of Supa, was pursued by Raya Murari, and finding that the city could not stand a siege in despair drowned himself in a well. According to Lingayat accounts the origin of the contest between Basav and king Bijjal was that the king put out the eyes of Allayya and Madhuvayya two of Basav's staunchest followers. Basav left to his friend Jagaddev the task of punishing the king's cruelty, oursed Kalyan, and retired to Sangameshvar the sacred meeting of the Krishna and Malaprabha about a hundred miles west of Bellári. At Kalyan, soon after Basav left, under his curso, cocks crow by night, jackals howled by day, there were eclipses, storms, earthquakes, and darkness. The people's hearts failed them. Under the taunts of his mother Parvati and with the help of two Lingayat saints Mallaya and Bommaya, Jagaddev, Basav's champion, swore to avenge Basav's wrong. The three champions smeared their bodies with ashes, took swords and spears, and started to slay the king. Before them went a bull goring all who came in its way. They passed through the palace and the courtiers, and slew the king in his hall of state.1 They came out of the palace, dunced in front of the people, and told them that the king had perished because he had lifted his hand against two of the saints of the new religion. Discord fell on the city, man fought with man, horse with horse, elephant with

¹ Bijjal was slain in 1168. Madras Journal of Lit. and Science, XI. 145.

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Lingarats.

elephant, till Kalyan was destroyed. Basav continued to live at Sangameshvar. He was weary of life; his task of reviving the old and true faith was done: he prayed Shiv to set him free. Shiv and Parvati came forth from the ling, raised Basav and led him into the holy place, and he was seen no more. Flowers fell from the sky and his followers knew that Basava had been taken into the ling. According to Lingayat books Basav was helped in spreading his religion by his power of working miracles. He turned corn into pearls, found treasures, fed the hungry, healed the sick, and raised the dead. Basav spent the king's treasury in alms to Jangams. A noble told the king who called Basav to account; Basav smiling handed the key to the king and the treasure was found untouched. The mistress of a Jangam, who was a dancing girl, envied Gangamma, Basav's wife, the richness of her robes. The Jangam asked Basav to spare him one of his wife's robes. Basav took his wife's robe off her body and gave it to the Jangam. Other dresses sprang from Gangamma's body and all were given to the Jangam. The leading doctrines and rules of Basav's faith were that there is one god who guards from evil; that between this god and his worshipper there is no need of a go-between and no need of sacrifices, penances, pilgrimages, or fasts; that as all lingwearers are equal, the Lingayat woman is as high as the Lingayat man, and that therefore she should not marry till she comes of age and should have a voice in choosing her husband; that as all ling-wearers are equal all caste distinctions cease; a true believer and ling-wearer cannot be therefore birth, women's monthly sickness, and death cause the Lingayat no impurity; that at death the true believer goes straight to Shiv's heaven, therefore his soul cannot wander into a low caste man or an animal, therefore he needs no funeral rites to help him to heaven or to keep him from wandering on earth an uneasy ghost; that as Shiv is an all-powerful guardian the wearer of his emblem need fear no ovil, astrology is useless as the influence of the stars is powerless, the evil eye, wandering spirits, spells, and charms, none of these can harm the Lingayat. Many of these beliefs are not acted upon even by Shilvants and Banjigs the strictest of Dhárwár Jangams, and some of the lower classes of Lingáyats, the Salis, Patta Salis, and some of the Sadars do not even wear the ling though they profess to be Lingayats. The rules against observing ceremonial purity and performing after-death rites are kept by the higher classes of Dharwar Lingayats, but the lower classes do not strictly obey them. The Dharwar Lingayat Salis either burn or bury their dead, and when they burn the dead they keep all the after-death ceremonies observed by Brahmanic Hindus. Among the Patta Sali Lingayats birth and death cause impurity for five days, and a woman in her monthly sickness is impure until she bathes, and, even after bathing, she does not cook or enter the idel room for three days. Basav's views regarding the uselessness of sacrifice, penance, and fasting, are strictly observed by all high class Dharwar Jangams. In

¹ Wilson's McKenzie Collections, 306-307.

Chapter III, Population. LINGAYATS.

Dhárwár though the Lingáyats consider the ling their chief god. they occasionally worship the village goddesses Dayamava and Durgava, and sometimes the Vaishnav god Hanuman. The same practice prevails in Bijápur and to some extent in Belgaum. In Kolhápur, Poona, and Sátára even Lingáyat priests do not scruple to worship the Brahmanic gods Ganpati, Hanuman, Radha, and The feeling of caste exclusiveness is stronger in Krishna.1 Dhárwár than in Bijápur. In Bijápur all pure Lingáyats like Banjigs and Shilvants can perform diksha or initiation; in Dharwar no one but a Jangam can be initiated as a priest. In Dhárwár, as in Bijápur, Lingáyats of all classes eat together in a religious house or in the presence of a Jangam, and a Jangam can marry the daughter of a pure Lingáyat a Shilvant or a Banjig. In Kolhapur neither eating together nor intermarriage is allowed among the different classes of Lingayats. If it was ever put in practice Basav's theory of the equality of women and men is no longer acted on. In Dharwar the position of married women is much the same as among Brahmanic Hindus, except that special honour is paid to the Basavis or unmarried women devotees.2 In Kolhapur Poons and Satara the position of Lingayat women is much the same as of Bráhmanic women and even the Basavis are held in little respect. The Brahmanic rule of early marriage is strictly observed in Kolhápur and Sátára, it is less strict in Bijápur and in Dhárwár, though early marriage is the practice, it is not held binding, and the custom of the bride and bridegroom passing the first night together, even though children, suggests that the present practice of adult marriage in Maisur was once prevalent in Dhárwár. Widow marriage is allowed by all classes in Dharwar, and in Bijapur by all classes except Jangams; in Kolhapur the higher classes forbid it. In all places widows are held unlucky; in none have they to lose their hair, bangles, or bodice. In the northern districts, in Poons, Sátára, Kolhápur, and Belgaum, the Lingáyat faith is declining and many Lingáyats are adopting Bráhmanical ways of worship, ceremonies, and gods. On the other hand in Bijápur, in Dhárwár, and in parts of Southern India, Lingáyatism appears to be gaining ground.3 In Bijapur Mr. Cumine (1877-1879) found that the preference for Jangams over Brahmans was constantly spreading; in Dhárwár the Ilgerus who a few years ago used to keep the Bráhmanic ritual and burn their dead, have lately begun to bury their dead and call Jangams to their funerals; and in the Bastar plateau in Madras a number of Kois have lately become Lingayats.4 As regards the future state Lingayats believe that the wearers of the ling are not liable to transmigration. According to his conduct a Lingayat after death is sent either to heaven or to hell, and where he is

¹ Ráma Nágu a Sátára Jangam, now in Bombay, has in his house images of Rádha, Krishna, Virupáksh, the Ling, Nandi, the Sháligrám, and the goddess Vardani. All of these he daily worships. He says that many Jangams in Sátára and Kolhápur worship Brahmanic gods.

worship Branmanic gous.

2 These Basavis are probably the celibate women to whom Mr, Brown refers.

Madras Journal Lit. and Sc. XI. 174.

2 Bijapur Statistical Account, Bombay Gazetteer,

4 The Reverend J. Cain in Ind. Ant. VIII, 219.

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sent there he stays. The Lingayat belief that none of the house spirits can come back frees them from one great section of the Brahman ritual. They have no offering to the dead of sesamum, sacred grass, burnt sacrifices, new moon and full moon rites, and pourings of water.1 In their disregard of after-death rites the Lingáyats agree with the Jains. In the matter of eating and drinking the Jains and Lingáyats are also at one. Both forbid the use of liquor and of animal food; and hold that to take life is the greatest crime.2 The Lingavats have borrowed their prayers from the Vedas,3 and so have the Jains; and, so far as the doctrines they teach are conformable to the Jain tenets, the Vedas are admitted and quoted as an authority by the Jains. The Lingayats, instead of using the Brahman sun-hymn, use the panchakshari or five-syllabled spell Namasshiraya that is Glory to Shiv, and the Jains instead of using the sun-hymn use the five-syllabled spell Namassiddhaya or Glory to the Siddhas or Saints. In these and in other points Jainism and Linguyatism seem to be nearer each other than to Brahmanism. Many Lingayat practices are early and southern, the result of Basav's attempts to win the lower orders, and of the influence of low-caste men who at first were let into the community and rose to the rank of saints. The resemblance between the Jain and the Lingáyat rules about eating and drinking, about tenderness for life. and about the non-return of the spirits of the dead suggest that many Lingáyats represent converts from Jainism. This view finds support in the fact that the strength of the Linguyats is in a Váni class who were formerly chiefly Jains, and that the Panchams or Panchamsális, another leading branch of Lingáyats, appear to take their name from and to represent the fifth or lowest class of Jains. a despised community to which all widow-marrying Jains are degraded. It was natural that Panchams should take to a religion that did not hold widow-marriage an offence. Again, after the overthrow of the Kalachurya dynasty of Kalyan and after the conversion of the Hoysala Ballal king Vishnu Vardhan (1117-1138) to Vaishnavism, the Karnatak Jains were depressed. Their power was

Madras Journal of Literature and Science, XI, 172,

Thereof of the Lingsyat and Jain dislike of taking life seems to be that it is by taking life that the world is haunted with spirits, or in modern language is laden with sin. The Jain diels lief in a soul take, away from the faithful the chief cause of spirit production; it desires, the great army of family phosts. If no outside spirit skilled and therefore curacid, spirits will pass through their circle of lives till they care and the world will be sinless, that is ghostices. So, also, Languart family ghosts are impossible for all are as a cither in heaven or in hell, and so Languarts. consider the taking of hie the deadliest of single cause if the outside spirits were not consider the Liling of the the death store that he cause it the outside spirits were now worried they would pass through their phases of life and cease. In practice suckness and ill luck, the two chief forms of spirit influence, come to Jama, Britim ins, and Lingipats alike. The world swarms with outside spirits; neither directors nor the Ling, though no doubt of great value, can do everything. We must consult the stars, get the help of turneries, exercises, bell kives, considing paths, anything of proved worth as a spirit ceaser. So in practice Jamas and Lingipats are not less given to exercise and neither that the corresponding above to the thin me Hinding. . to exercirm and magic than the corresponding classes of Brahm me Hindus.

Brown in Madrae Journal of Literature and Science, X1. 171.

⁴ Wilson in Ascatic Researches, AVII, 243, 5 Wilson in Ascatic Researches, AVII, 273,

⁶ Among the Jangam raint care many Pari deaned women, but not one Brilman, Madras Journal of Lat. and Sc. XI, 116. The Langayat worther are shoemakers, hunters, and weavers. Ditto, 151,

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Population.
Lingsyars.

going and their guardian Jineshvar failed to save them in this life and gave them little to look forward to in the world to come. The ling perhaps could not save the wearer from trouble in this world, but it ensured a life of enjoyment in the next. Basav's book ideas of the joys of heaven may have been as refined and unreal as a Jain's. What his followers, at least his fighting followers, believed to be the fruits of ling-worship is shown by the garlands, heavenly damsels, and feasts, which paint the true believer's future on the Shaiv Virgallas or Hero tomb-stones.

JANGANS.

Jangams, literally moveables, that is ling-possessed mortals, also called Ayyas or Lingayat priests, numbering about 40,000, are found all over the district. They speak Kanarese. The names in common use among men are Changasayya, Mállayya, and Rudrayya; and among women Basava, Mállava, and Ningava. They have no surnames, and are generally known by the names of the towns or villages in which they live. In appearance, in some respects, they resemble Sanyásis or ascetics of the Smart sect. They live in maths or religious houses which are generally one-storeyed buildings, clean, and cared for. Jangams are divided into two classes, Dhatasthalas or Viraktas who are unmarried and Gurusthalas who are married. The Virakta or recluse is holy, free from worldly cares, and unwed. Viraktas are not allowed to become gurus or spiritual guides or to exercise religious authority over other Lingayats. They are expected to spend their time in reading and explaining the holy books. There are few Viraktas, and they are respected and worshipped. When they grow aged or are about to die they choose a successor from some religious and virtuous Gurusthal or married Jangam The successor is generally a boy under ten and in most cases is related to the Virakta whom he is to succeed. Before being made a Virakta the boy is consecrated. The Gurusthalas are a class of Lingáyat clergy who become the gurus or spiritual guides of Lingáyat laymen. Unlike Lingáyat laymen they can only marry maidens and not widows or divorced women. They conduct all religious ceremonies on occasions of births, marriages, and deaths under the direction or superintendence of Patdayas or monastery heads. From the Gurusthala class boys are chosen to fill the office of Virakta or Patdaya. Viraktas and Patdayas never leave their religious houses. They direct their chief assistants who are called Charantis or movers to do all the work of the house, to gather the money grain and cloth offerings made by laymen, and generally to look after the affairs of the monastery. The Viraktas and Patdayas, besides their Charantis or chief active assistants, have two to twelve junior assistants called Maris or youths, however old they The youths' duties are to bring flowers for the daily worship performed by the chief priests, to arrange the vessels used in worship, to light lamps, and to bring fire to burn incense at the time of worshipping. The Charantis and Maris are chosen when boys from Gurusthala families. The Patdayas, the Charantis, and such of the Maris as may be intended to be made Patdayas or

² Jangams is a Vedic word and meant that they were the living houses of the deity. Brown in Madras Journal of Lit. and Sc. XI, 145.

monastery-heads are not allowed to marry. The remaining Maris

or youths are free to marry if they choose. The Patdayas superintend all religious work in their parish which includes one village or a group of villages, punish religious offenders by putting them out of caste, and let them back into caste on paying a heavy fine and undergoing religious penance. Besides Maris or youths the Viraktas, Patdayas, and Charantis have servants to cook, to bring water, to wash their clothes, and to make their beds. Viraktas lead the lives of recluses, and, as far as they can, avoid mixing with their relations. Gurusthalas, though they live in the monasteries, lead a married life and do not object to have their relations staying with them. All of these classes are included under the general term Jangam. Viraktas, Patdayas, Charantis, and Maris bathe once, twice, or three times a day according to their purity. The incomes of their maths or religious houses consist of money, grain, and cloth presents from the laity and fines paid by religious offenders. The heads of the houses are either Viraktas or Patdayas helped by Charantis and Maris. A few maths are under Charantis helped by Maris or youths. Daily in the morning and evening in their religious houses the Viraktas and Patdayas worship the ling and deck it with flowers. disciples wash their feet twice. The water in which the feet are first washed is called dhulpádodak or feet-dust water. Lingáyat laymen sprinkle this water over their bodies and on the walls of their houses. The water in which the priests' toes are washed for the second time is first used to wash and worship the stone lings worn round the high priests' necks. This water becomes very holy and is called karuna or grace. When laymen and others come to the religious house they throw themselves before the Viraktas or Paldayas, receive a few drops of karuna water and sip it. The priest

gives the layman a cocoanut or other fruit from their own hands as a blessing, and sets his right foot on the visitor's head who withdraws. Jangams are great eaters and bad cooks. Their daily food is rice, wheat, or Indian millet bread, michu or granulated Indian millet boiled in water and made into a hard mass, ambli or ragi-flour boiled in water and made into gruel, vegetables including onions and garlic, boiled butter, milk, curds, and pickles. They do not use flesh or intoxicating drinks. Some take their meals once a day only, others are obliged to cat several times a day, as, when several laymen invite them to dine at their houses, they consider it discourteous to refuse. The Jangams go to as many houses as they can on the same day, eat a little in each house, and withdraw. When they take their meals in their religious houses long mats or cloth carpets are spread on the ground and a threelegged wooden stool about ten inches high and ten inches across called an addangi, is set in front of each person who sits on the mat and a brass or bellmetal plate is placed on each of the stools. Food is served in each plate and they eat it. After finishing their meal, the priests and other religious persons are forced to wash the plates with a little water which they drink as such water must not be thrown away. When this is done each person wipes the plate set before him with his shouldercloth and sets it again on the stool. Chapter III.
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Any of the brass plates may afterwards be set before any other person and he will take his meals out of it, but a bellmetal plate can be used by only one person. The Virkatas, Patdayas. Charantis, and Maris wear a loincloth, a piece about six inches broad and two feet long, one end of which is fixed to a string tied round the waist and the other is passed between the legs and tied behind to the same string. Over this loincloth the priests but not the laymen roll a larger cloth. They cover their shoulders and tie round their heads two other pieces of cloth all of red other. They wear shoes of cotton or hemp cloth, or of wood, but never of leather. Other Jangams that is Gurusthalas or married priests, in addition to the above dress wear a coat, and like other Lingarat women, their women wear a robe and a bodice. The men mark the brow and the body with white ashes, wear a garland of rudráksh Eleocarpus lanceolatus beads round the neck, a ckauka or cubical silver box the upper side of which is like a pyramid, and a gundgurdgi or round silver box in which they keep the ling. The women wear silver or gold armlets, ear and nose rings, necklaces, and waistbands. They are honest, even-tempered, hospitable, and orderly. The daily life of Jangams, especially of the Virkatas and Patdayas, that is the heads of the different religious houses, passes in performing ablutions, in worshipping the lings which they wear, in receiving the adoration of laymen, in taking their meals, and in reading and explaining religious books to the laity.1 The Patdayas also enquire into and dispose of religious disputes, punish religious offenders by fine or excommunication, re-admit them into caste on their paying the fines imposed upon them and undergoing certain penances, and conduct birth, marriage, death, and other religious ceremonies. The Charantis and Maris obey the orders given to them by the Viraktas and Patdayas. Jangam women mind the house and sometimes keep inus for the convenience of the people of the town or of travellers belonging to the Lingáyat sect. A family of five spends about £1 (Rs. 10) a month on food. A house costs them about £20 (Rs. 200) to build, and the value of their house goods is about £5 (Rs. 50). A birth costs about 16s. (Rs. 8), an initiation into the priesthood about £2 10s. (Rs. 25), a marriage about £20 (Rs. 200), a girl's coming of age about £2 10s. (Rs. 25), a pregnancy about £1 (Rs. 10), and a death about £2 10s. (Rs. 25). They are very religious. They do not worship the ordinary Bráhmanic gods as Vishnu, Rám, and Krishna, and do not respect Brahmans. Daily in the morning and evening before taking their meals they present flowers, ashes, and sandal-paste to a stone ling which they wear bound round their neck. They make pilgrimages to Ulvi in North Kánara and to Dhrisel in Madras. Their head guru or poutiff, called Murgyasvámi, lives at Chitaldurg in Maisur. They do not keep the sixteen Bráhmanic sanskárs or sacraments, but have special ceremonies of their own. When a child

¹ The chief sacred books of the Lingayats are the Basav and the Chena Basav purdus written in Hale Kannada or old Kanarese. They contain tales and miraculous stories regarding their gurus and saints. All their literature is more popular than learned. Rice's Mysorc and Coorg, I. 383.

is born its navel cord is cut and a Lingáyat priest is called. When the priest comes he is seated and his feet are washed with water in a brass tray. The water is called dhulpádodak or foot-dust water. It is rubbed all over the bodies of those present, and a few drops of it are sprinkled on the walls to purify the house. The priest's great toes are washed in a cup, verses are repeated, and his feet are worshipped. He washes the ling which he wears in the water in which his tors have been washed and the water is called kriya padodak or holy feet water. He next applies the brim of the cup to his lips and sips a few drops of the water. The sipping of this holy water is by the Lingáyats called karuna or grace. The priest keeps his hand on the cup for about half an hour, during which pious Lingayats bow before him and ask for a sip of karuna or grace. The priest allows each person to take a few drops of the holy water from the cup and then washes the stone ling he wears round his neck with the water, sips it, and rubs his fingers over his body till they are dry. Next the priest consecrates a new ling by washing it in the rest of the karuna or holy water; he folds it in a piece of cloth and ties it round the neck of the babe for a minute or two, then gives it to the mother to take care of till the child grows old enough to wear it. The priest is fed, presented with money, and allowed to leave. It is believed that on the fifth day the goddess Sathi comes to take away the life of the child. To please her she is worshipped on that night and cooked food is offered to her. The Lingáyats say that this is not a pure Lingáyat custom, but that it is practised by their women in imitation of other Hindus. On the thirteenth day a Lingayat priest is again called, and, after performing the foot-dust and holy water ceremonies, names the child, and blesses it by laying the palm of his right hand on its head. In the evening five women whose first husbands are alive are invited. A cradle is brought and put in the women's rooms, and five lighted lamps are set near it. Friends and kinswomen present the mother with robes and bodices and the five women put the child into the cradle. Betelnuts and leaves are handed among the guests and they withdraw. A day or two before the end of the month several women take the mother to a river pond or well where she worships water, offering turmeric paste flowers and redpowder, and returns with a pitcher of water. When the child is about a year old a Lingáyat priest is called, his feet are washed, and he is feasted and presented with a small sum of money. The priest holds two betel leaves in the form of a pair of scissors and with them touches the longest hair on the child's head. The barber then trims the hair. This is called sadi katri sona or the hair-cutting. If the hair-cutting is not performed before the end of the first year, it is done in the course of the third year, and if not in the third it is done in the fifth year. The hair of boys is trimmed at any time even after their fifth year; girls' hair is not cut after they are five years old. Lingáyats say that they cut the hair of girls under five, as, if their hair is long, it might touch a woman in her monthly sickness which they believe would give the child certain diseases. When a boy is about ten the diksha or initiation is performed. When a marriage is settled the first thing Jangams do is to see whether the parties are followers of the same guru or spiritual guide or belong to the

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same family-stock. If they have the same spiritual guide or if they belong to the same family-stock they cannot marry. If they have different spiritual guides and belong to different family-stocks a Lingáyat Ayya or a Bráhman astrologer is asked to compare the horoscopes of the boy and girl. If the horoscopes agree, on a lucky day named by the astrologer, the boy's party with friends and kinspeople go to the bride's house, and, in the presence of a Lingayat priest, some respectable men of the town and five women whose husbands are alive, make the marriage settlement and fix a lucky day for the marriage. Betelnuts and leaves and cocoa-kernel are handed to the guests and a feast is given to the bridegroom's party. A few days before the day fixed for the wedding the bride's party send a letter to the bridegroom's house with two pieces of bodicecloth, five cocoanuts, five pieces of palm-leaves, five shers of rice, five lemons. five betelnuts, five turmeric roots, and five lumps of coarse sugar, and ask them to come and take the bride in marriage on a certain day. On the day named, when the bridegroom lives in a different village from the bride, his party with friends and kinspeople come to the bride's village and halt at the boundary. The bride's party go in procession with friends, kinspeople, priests, and music. and bring them into the village where a suitable lodging has been made ready for them. Next day at the bride's five small earthen vessels are worshipped and then the bride with a few friends and relations goes to the bridegroom's. The bride and bridegroom are seated on low wooden stools and rubbed with sesamum-seed and turmeric-powder mixed together by the aidgetterus or five women whose first husbands are alive and cotton thread is wound five times round them. This is called surgi suttona or the thread-winding. The bride and bridegroom are then taken to the bride's house where a priest gives them karuna or sacred water to Next day the bride and bridegroom are again rubbed with turmeric and sip holy water and the bride's party carry to the bridegroom's house a basket full of sweet eatables and provisions and a pitcher full of water. The bridegroom's party receive the same. and present the bearers with cloths and betelnuts and leaves. At the houses of both the bride and the bridegroom the family gods are worshipped and provisions are sent to the Lingayat religious houses. Next comes the gugala when either the boy's or the girl's party or both carry earthen pots full of lights to a Lingayat temple. This closes the day's ceremonies. Next day married women rub the bride and bridegroom with turmeric and powdered sesamum-seed and the priest prepares holy water and gives them a few drops to The bride's party takes cooked food called misaluta to the bridegroom's house and the bridegroom eats some of it. bride's father sets the bridegroom's feet in a plate and washes them with water, and the father and mother lay flowers and redpowder before them. The bridegroom, dressed in fine clothes, decked with the marriage coronet and ornaments, and rubbed with vibhuti or cowdung ashes goes in procession on a bullock to a Lingayat temple, worships the god, and goes on to the bride's. On reaching the bride's the bridegroom is seated on a sofa, new clothes

¹ Lately in imitation of Bráhmans rich Lingáyats have begun to seat the bridegroom on a horse instead of on a bullock.

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and ornaments are presented to him, and turmeric powder is rubbed over his cheeks, hands, and feet. He is led into an inner room where the officiating priest conducts the religious part of the ceremony. The bride and bridegroom are seated on a rice-strewn carpet which is spread on a cowdunged floor, and to their right two unmarried girls called balgudamas or bride's maids are seated. In front of them are set the pancha kalasha or five vessels one at each corner of a square and one in the middle, and into each vessel pearls, precious stones, silver, gold, brass, and copper coins are dropped. Betelnuts and leaves and coccanuts are placed on the vessels, and a thread is passed five times round them. and, without, any break, continued into the hands of the priest, and thence into the right hand of the bridegroom. The part of the long unbroken thread that is tied round the vessels is called surgi, and the portion between the hands of the priest and the bridegroom is called guru sutra or the priest's holy thread. All this time the priest repeats sacred verses and the bride holds the bridegroom's right hand. The mathpati or Lingayat beadle and sexton mixes curds, milk, clarified butter, sugar, and honey in a small vessel, pours some of the mixture on the bridegroom's right hand which is touched by the bride, and five times washes the hands of the bride and bridegroom. The Lingayat priest and all who are present throw a few grains of red rice over the heads of the bride and bridegroom, the five married women dropping on them large double handfuls of red rice and five times waving lighted lamps round their faces. The priest worships the mangalsutra or lucky thread by laying on it flowers, redpowder, and grains of rice, and gives it to the five married women who bind it round the bride's neck. The part of the long thread held by the priest and the bridegroom is cut from the part which is round the five vessels and is tied round the right wrist of the bridegroom with a piece of turmeric root and a betel leaf. This thread is called guru kankan or the priest's bracelet. The five married women tie the thread that was round the five vessels together with a turmeric root round the bride's right wrist and this is called the vadhu kankan or the bride's bracelet. The bride and bridegroom bow to the priest, to the family gods, and to the elders. Friends and kinspeople and the Lingayat priests are feasted, and the bride and bridegroom are made to eat from the same plate. This ends the wedding-day rites. Next day the boy and girl worship the priest by laying before them flowers, sandal paste, and grains of rice, and sip holy water. After dinner they are carried through the chief streets of the town in procession with music, drums, fireworks, dancing girls, and lighted torches to a Lingayat temple. There the pair bow to the god, offer flowers and fruit, and the whole party return home with

the same state. As the bride and bridegroom are entering the house the bridegroom's sister, and if he has no sister some other girl, stops them at the threshold, holds their feet, and makes them promise to give their daughter to her son. They promise and are allowed to enter the house. The bride is then made over to her mother-in-law. The bridegroom's mother sits on a bullock's saddle placed or 'a ground as if upon a chair with her knees open.

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left knee. The bride and bridegroom then change places. Five married women ask the mother which of the two flowers or fruits is heavier, meaning which of the two the son or the daughterin-law she likes best. The mother replies Both are equal. The married women advise the mother to take care of the son and his wife equally, and this the mother agrees to do. The bride and bridegroom are taken into the marriage-shed where a barber rubs turmeric powder on their hands and feet, and the five married women bathe them and wave lighted lamps round their faces. The wet clothes which the married couple leave belong to the barber and are taken by him. A feast is given to friends and relations and the marriage is over. The bridegroom's party return to their village while the bride remains at her father's house. When the bride grows about twelve or thirteen years old the bridegroom's party comes to the bride's house and take the bride and her parents in procession to the house of the bridegroom. At the bridegroom's house festive dinners are given, new clothes and ornaments are presented to the bride and bridegroom, and after waving lighted lamps round their faces they are sent into the bridegroom's room, although the bride may not have come of age. On the following day a feast is given to friends and relations. When a girl comes of age she is bathed and seated for three days in an ornamental canony prepared for the purpose. Female friends and kinswomen are asked, and flowers, betel leaves, turmeric, redpowder, and wet gram are served to them. Near relations bring cooked food and sweetmeats part of which the girl is told to eat. On the fourth day the girl is bathed and no other ceremonies are performed. During her future monthly sicknesses though she is not held impure, the Jangam woman is not allowed to cook or to go into the god-room. When a Jangam is on the point of death he is bathed and made to sit on a clean bedding spread on a freshly cowdunged part of the floor. A Lingáyat priest is sent for. When he comes his feet are twice washed with water, and a few drops of the water are poured into the dying man's mouth. The priest rubs the dying man with vibhuti or cowdung ashes and fastens a necklace of rudráksha Eleocarpus lanceolatus beads round his neck. The dying man in return gives the priest betel leaves and nuts, a ball of vibhuti or white ashes, and some money. When life is gone the priest is again sent for. the dead is a married man or woman, or a priest, he is placed sitting, marked with white ashes, and decked with ornaments. The chief priest sets his right foot on the head, and the mathpati or Lingayat beadle lays flowers and redpowder on the priest's foot. If other Lingayat priests are present they touch the head of the deceased with their right foot. The body is brought out of the house and set in an ornamental wooden car prepared for the occasion. The beadle tears in front of the corpse a piece of new cloth as a token that the deceased's connection with the world is severed. Four Lingayats carry the body in the car-shaped bier to the burial ground and set it at a little distance from the pit which is dug to receive it. All the good clothes and ornaments are removed from the body and taken by the deceased's son or other relation, and the deceased's headdress is put on the head of his eldest son. priests go forward to the grave and then come back towards the

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funeral party, as if messengers from heaven sent by Shiv. They ask whose body it is and where his spirit is going. The people name the deceased and add His spirit is on its way to Shiv's heaven The priests say Come, and lead the funeral party with the body to the side of the grave. The body with the ling round its neck is put into a cloth bag and placed in a sitting posture in a niche in the grave-side. The sexton goes into the grave and the Lingáyat priest gives him twenty-one small copper pieces, with some holy words written on thom, which he places on the different parts of the body. A cloth is held over the body and all present repeat hely verses and throw leaves of bilva Ægle marmelos, flowers, and white ashes into the cloth. The sexton gathers the leaves and flowers and lays them on the body and every one present throws a handful of earth on the body. The sexton comes out of the grave, salt is thrown in, and the grave is closed. The priest stands on the grave, a coconnut is broken at his feet, flowers and redpowder are laid on his feet, and the party return home. On reaching home, the eldest son of the deceased purifies the house by sprinkling foot-dust water over the walls and floor of the house and feeds one or two priests.1 At the end of a month a feast is given to a few Lingayat priests. Children and the unmarried dead are carried on biers and buried lying at full length. The priest does not stand on the grave and his feet are not washed. When the burial ground belongs to a Lingáyat priest some money is paid to him as hire-money and the clothes worn by the dead are given to him. When the body is buried in a public ground the clothes are taken by the Holayas or villagewatchmen. Jangams with their disciples or adherents have formed themselves into associations called Samujs or meetings, each having a distinct name as Komar, Murgy, Chillal, and Kempu. Each religious house or math is called after the name of the meeting to which its chief priest belongs. Some houses and priests belong to no meeting. Jangams have no strong caste feeling. Child and widow marriage and polygamy are allowed; polyandry is unknown. Many of them send their children to school and a few take to new pursuits. On the whole they are a steady class.

Traders, included sixteen classes with a total strength of 53,108 or 6.80 per cent of the Hindu population. The details are:

TRADERS.

Dháracár Traders, 1881.

		25760	71047 211				
Dr. isiov.	Males.	Females.	Total.	DIVICION.	Males.	Females	Total.
Adinbajigārs Gurjārs Lāds Lavānās Lungājat Vānis or Banjugs Lokābaliki Lingājat yats	10,745	4148 68 5164 753 2002 11,042	8509 148 10,828 1478 4146 21,787	Mirwiris Nirvelars and Bindekars Shilicant Lingipats Stunnigars Timbolis Telugu Banjigars Telugu Banjigars Valshyas or Komtis Total	76 105 496 23 3 691 95 434	1 163 576 24 6 601 29 359 26,493	17 253 1071 5,3 9 135,4 183 823 53,103

¹ In Madras a ling is put on the grave and 18 worshipped fourteen days, Madras Journal of Lit, and Sc. XI, 169.

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Adibanjigars.

Adibanjiga'rs, numbering about 8500, are found in all sub-divisions of the district except in Hubli. The name Adibanjigar is derived from the words adi first and banjigar Lingayat, and means the first They speak impure Kanarese. The names in common Lingávats. use among men are Basáppa, Malláppa, and Ningáppa; and among women Basava, Kareva, and Mallava. They live in tiled houses with walls of sun-burnt brick and mud. The houses are neat, clean, and well-cared for. They keep cows, buffaloes, and oxen. They are moderate caters and good cooks. Their daily food is Indian millet bread, vegetables, curds, and milk, and their holiday dishes, in addition to the above, are rice and sweet cakes. They do not use animal food or intoxicating drinks. In matters of dress and ornaments they do not differ from other Lingáyats.1 In character they are hospitable, hardworking, neat, clean, even-tempered, and orderly. Their main calling is to trade in grain, cotton, and other articles, and to retail opium, hemp-flowers or gánja, and hemp-water or bháng. They are helped in their work by their women and children. Their calling prospers. Most of them are well-to-do, and they make good use of their money putting it into trade, not hoarding it and burying it like many other classes. Their busiest months are May June and They do not work on holidays and their holidays are the same as those of other Lingáyats. A family of five spends about £1 (Rs.10) It costs them about £40 (Rs. 400) to build a house, and about 4s.(Rs. 2) a month to hire a house. The value of their household furniture is about £30 (Rs. 300), and of their dress about £2 (Rs. 20). A birth costs about 8s. (Rs. 4), a son's marriage about £20 (Rs. 200), a coming of age about £2 (Rs. 20), a pregnancy about 10s. (Rs. 5), and a death about £2 (Rs.20). A daughter's marriage costs more than a son's as a considerable sum has to be paid as dowry. Their religious rites and customs differ little from those of other Lingayats. are bound together by a strong caste-feeling, social disputes are settled by the majority of the caste, and any one who disobeys their decisions is put out of caste. They send their boys and girls to school, take to new pursuits, and are a steady class.

Gurjare,

Gurjars, or Gujarát Vánis, numbering about 148, are found in Gadag, Hubli, Kalghatgi, and Navalgund. Their home tongue is Gujaráti and they speak impure Kánarese with the people of the district. They have settled in Dhárwár as moneylenders and bills brokers. They are honest and thrifty and are said to be careful to keep to Gujarát customs.

Jains.

Jains, literally Conquerors, returned as numbering about 10,526, are found all over the district. The Dhárwár Jains are old settlers and have no memory of any former home. They seem to be the remnant of the community of Jains whose faith was the ruling or one of the ruling religions of the Bombay Karnátak from about 1540 to 1763. They say that an ancient Hindu king named Ikshváku had two family priests named Parvat and Nárad who held different views on the subject of animal sacrifice. Parvat sacrificed sheep to the god of fire, and Nárad sacrificed parched grain. The descendants of Parvat are the Bráhmans and their followers, and the descendants of Nárad

Details are given under Lingayats, Banjigs, and Jangams.

are the Jains. According to the Jain books there were formerly four divisions, Brahmans or priests, Kshatris or warriors, Vaishyas or merchants, and Shudras or labourers. Jaiu Kshatris have disappeared, but Jain Brahmans, Vaishyas, and Shudras remain. Jain Shudras are also called Jain Chaturthas that is the fourth estate. Of the whole Jain community and especially of the Jain Chaturthas, those who allow widow marriage form a separate class called Jain Panchams or Jain Fifths. At present a Jain of any of the first four classes who marries a widow joins the Panchams. A Jain priest eats from any of the other four classes, and will take in marriage the daughter of a Vaishya Jain, but not of a Chaturtha or of a Pancham Jain. Jain priests give their daughters in marriage to no one but priests, and Jain Chaturthas and Jain Panchams do not marry with each other. These rules are observed only in the Deccan and the Bombay Karnátak. If Karnátak Jains go to Gujarát, they do not dine with Gujarát Jains, nor, when they come to Dhárwar, do Gujarát Jains dine with local Jains. In some past time about a hundred families of Jains committed some fault against their religion and were put out of caste. Their descendants are called Shatavallas or the hundred families and other Jains neither cat nor marry with them.

Dhárwár Jains speak Kánarese. The names in common use among men aro Aharadás, Balálráya, Jindás, and Padmanábháppa; and among women Chandramateva, Padmava, Rajamateva, and Ramabai. They have no surnames. Their chief god is Jineshvar whose leading shrine is at Belgol in Maisur. In appearance they are strong and muscular, some of them dark and others fair. Most of them live in houses of the better class, two or more storeys high with walls of brick and tiled roofs. They are moderate eaters and good cooks. Their daily food is rice, bread, vegetables, clarified butter, curds, and milk. Their holiday dishes are sweet cakes made of wheat, sugar, clarified butter, and spices. They take their meals only during the day and never at night. They do not use flesh or intoxicating drinks. The men wear the loin and shouldercloths, a jacket, a rumal or headscarf, and shoes, and the women wear a robe and a bodice. Both men and women are clean and neat in their dress. In character they are honest, hardworking, thrifty, active, even-tempered, hospitable, and orderly. Their main calling is dealing in brass and copper vessels, in cloth silk and indigo, and in money. Some have entered Government service and Jain Chaturthas and Jain Panchams till and labour for hire. As a class Jains are prosperous and free from debt. Socially they rank next to Brahmans. The food charges of a family of five are about £1 10s. (Rs. 15) a month, and the yearly dress charge about £5 (Rs. 50). A house costs about £50 (Rs. 500) to build, and about 4s. (Rs. 2) a month to hire, and their house goods are worth about £10 (Rs. 100). A birth costs about £2 (Rs. 20), a thread-girding about £4 (Rs. 40), a marriage about £30 (Rs. 300), a girl's coming of age about £1 10s. (Rs. 15), a pregnancy about £1 (Rs. 10), and a death about £3 (Rs. 30). They are religious. Their family gods are Chakreshar and his wife Gomukha, Dharanendar and his wife Padmávati, Lakshmi-Náráyan, and Kshetrapál, whom the head of the family daily worships. They do not respect Brahmans or call them to conduct their ceremonies. All these are performed

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by their own priests. They do not worship Brahmanic gods, but keep all the leading Hindu holidays, some of them in a way different from the Brahman way. On the Ganesh-chaturthi the bright fourth of Bhadrapad or September-October, instead of worshipping Ganpati, they worship the sage Gautam under the name of Ganadhip or Ganpati, and, during the nine days before Dasara in October, instead of worshipping Venkataraman like Dhárwar Brahmans, they worship Bharataráj an ancient king They go on pilgrimage to the shrine of Padmávati at of India. Hombas in Maisur, and of Guneshvar at Mudbidali in South Kanna. There are three leading sects Ralatkurgana whose head-quarters are at Hombas in Maisur, Lakshmishaingana whose head-quarters are at Kolhápur, and Jináshaingana whose head-quarters are at Nandanagi near Kolhapur. The Jain priests and the Kshatriya and Vaishya Jains are members by the Balatkargana sect, the Chaturthas of the Lakshmishaingana, and the Panchams of the Jinashaingana sect. Each sect has a guru or spiritual teacher who is a Jain ascetic. He gives the members religious instruction and they support him. He does not try to make converts. Jains of all classes believe in sorcerers, witches, and soothsayers, and consult them in cases of sickness or other misfortune. The Jains eat twice a day when the sun is above the horizon. Except some who take a night meal at night by stealth, they never eat at night for fear they may swallow insect life. At their meals they do not wear silk or woollen clothes like Brahmans, but wear clothes made of cotton or of hemp. As silk and wool are the produce of animals they consider them impure. They also, unlike Brahmans, consider it impure or polluting to touch the skin of a tiger or a deer after bathing. Their special religious days are eight days in overy fourth month in the year that is from the eighth to the fifteenth of the bright half of the months of Ashadh or July-August, Kartik or November-December, and Fálgun or March-April; the eighth and fourteenth of the dark and bright halves of every month in the year; dashaparva or ten special days in every month in the year, that is the second, fifth, eighth, eleventh, and fourteenth days of both the bright and dark halves of all months; Mangala trayodoshi or the thirteenth of the dark half of the month of Kurtik or November-December; and Sruta panchami or the fifth day of the bright half of the month of Jeshta or June-July. On all these days the Jains either fast or take only light food. During the four months of the south-west monsoon that is from June to October, except the Jain Chaturthas and Jain Panchams, Jains do not eat cucumbers, brinjals, menthi or Greek grass, the snakegourd, nuggikai Guilandina moringa, onions, and garlic. At the time of worshipping they first bathe their idols with milk, curds, clarified butter, sugar, and pieces of ripe plantains, and then with water. They offer sweet-smelling flowers to their idols, but neither the leaves of the tulsi or sweet basil nor of the bel Ægle marmelos. They do not sacrifice any animal to their gods. When water is brought from a pond, a well, or a river, it is never used for cooking and drinking until it has been strained in a cloth to remove insects. When a Jain makes his obeisance to a priest he joins his hands and says Namostu or My roverence. If he is a common porson the priest in reply says Punya-vriddhirastu or

May merit grow; if the priest be a great and holy man he says Saddharma-vriddhirastu or May religion prosper. A Jain must give away ten things in charity, food, protection, medicine. education, gold, silver, a girl in marriage, a cow, a horse, and a set of ropes or bags to draw water from a well. When a Jain gets holy water from his priest he does not sip it like a Brahman but throws it on his head. Jains keep most of the sixteen sacraments or sanskárs like Bráhmans. When a child is born its navel cord is cut, the mother and the child are bathed, and some honey and castor-oil are put into the babe's mouth by any one but its father. On the third day a Jain priest comes and worships the family idols and offers them food. On the fifth night the goddess Sathi is worshipped, and on the thirteenth day the child is named and cradled by its paternal aunt. On the eleventh day all the members of the family bathe, a feast is given to Jain priests, and the family becomes pure. On some day between the thirtieth and fortieth the mother and the child are bathed and taken to a temple and the child is presented to the god. The mother and child are taken to a well where she worships water, gives betelnuts and leaves to several women whose husbands are alive, and returns home with the child and a pitcher full of water. When a girl comes of age she is decked with flowers and ornaments and is made to sit for three days in a shed made of paper and tinsel. On the fourth day she is rubbed with oil and bathed in warm water. Within sixteen days from the day she came of age a lucky day is chosen, certain religious rites are gone through, a feast is given to members of the caste, and the girl and her husband are sent together into the marriage room. During the third month of a woman's first pregnancy the things she may have a craving for are given to her, and, on the last day of the third month, the girl is taken to a temple where vegetables are offered in honour of the gods. On the last day of the fifth month the vegetable-offering is repeated. In the seventh month of her pregnancy the girl is given a green robe and a bodice and from then till she is brought to bed she is specially well fed. The dead are burnt and the family is impure for ten days among Jain priests, for eleven days among Kshatriya and Vaishya Jains, and for fifteen days among Chaturthas and Panchams. Child marriage, widow marriage, and polygamy are allowed, and polyandry is unknown. In Maisur Jain girls are not married until they come of age. The members of each class of Jains are bound together as a body. Minor social disputes are settled by their priests and graver quarrels by their gurus or spiritual guides. Any one who disobeys a guru's decision is put out of caste. Caste authority is growing weaker day by day. They send their boys and girls to school, do not take to new pursuits, and are a rising class.

La'ds, or South Gujara'tis, numbering about 1476, are found all over the district except in Kod. They say that their ancestors formerly lived in Northern India, and came and settled in Dhárwár about two hundred years ago. They speak impure Kánarese. The names in common use among men are Ishvaráppa, Kristáppa, and Subrayáppa; and among women Kristáva, Subhadreva, and Yelláva. They have no surnames. Their family gods

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Láds.

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Ldds.

are Krishna and Pandurang, and their family goddesses Tulja-Bhaváni and Yellava. They are fair, strong, and muscular, more like Shimpis than any other class. They have large eyes, high noses, thin lips, low cheek-bones, and round cheeks. They live in tiled houses with walls of stone and mud. The houses have generally three or four rooms and are clean and well cared for. They keep cows and she-buffaloes and drink their milk. They are moderate eaters, but poor cooks. Their daily food is Indian milletbread, rice, pulse, and vegetables; and their special holiday dishes are sweet cakes made of wheat-flour, molasses, pulse, and clarified butter. They do not use animal food or intoxicating drinks. The men wear the loin and shouldercloths, a jacket, and a rumál or headscarf; and the women a robe and bodice. Some of the women pass the skirt of the robe between the feet and tuck it into the waist behind; others let the skirt fall like a petticoat. Both men and women are clean and neat in their dress. The men wear gold or silver ear and finger rings, and the women wear ear finger nose and toe rings, necklaces, waistbands, and chains. They are clean, neat, even-tempered, hospitable, honest, and orderly, but idle. The main calling of the most important subdivision, the Kshatriya Lads. is dealing in perfumes. Their calling is prosperous and they are free from debt. Their busy months are April, May, October, and November. They eat from the hands of Brahmans and the members of their own subdivision only. A family of five spends about £1 10s. (Rs. 15) a month on food. A house costs about £30 (Rs. 300) to build and about 2s. (Re. 1) a month to rent. The value of their house goods is about £20 (Rs. 200), and of their clothes about £4 (Rs. 40). A birth costs about £1 10s. (Rs. 15), a marriage about £20 (Rs. 200), a girl's coming of age about £5 (Rs. 50), a pregnancy about £2 10s. (Rs. 25), and a death about £5 (Rs. 50). A daughter's marriage costs more than a son's as a dowry is paid to the bridegroom. They are religious. They respect Brahmans and call them to conduct their marriages. They make pilgrimages to Tuljapur and Pandharpur, and keep the leading Hindu holidays. They have a guru or spiritual guide who lives at Benares. He does not try to gain new followers and is a Gosávi by caste. They believe in sorcery, witchcraft, and soothsaying. When a child is born its navel cord is cut and the child and the mother are bathed. On the fifth day the goddess Sathi is worshipped and friends and kinspeople are feasted. On the thirteenth the child is cradled and named. For three months the mother worships the goddess Sathi every Monday. At the end of the third month the child is carried to a temple and presented to the idol, plantains and betel are offered to the deity, and the child is brought home. Nothing further is done till marriage. The day before the wedding a feast called devaruta or god-dinner is given in honour of the family gods, and, on the wedding day, the bride and bridegroom are rubbed with turmeric, bathed, and made to sit on a raised seat. The Brahman priest repeats verses and throws red rice over the heads of the couple. This completes the marriage. The dead are buried and the family is held impure for ten days. Some funeral rites are performed from the fifth to the thirteenth day, and on the thirteenth day a feast is given to men of the caste. They are bound together as a body. Caste disputes are settled by their guru or spiritual guide, or by a majority of the castemen. Any one who disobeys their decisions is put out of caste. He is again admitted on paying the caste-people a fine of £1 (Rs. 10). They send their boys and girls to school, take to no new pursuits, and on the whole are a steady class.

Lava'nas, or Pack-bullock Carriers, numbering about 4146, are found all over the district. They generally live near forests or on They speak a mixture of Maráthi and Hindustáni. The names in common use among men are Imám, Lálu, Mansi, Rupa, Sheda, and Valya; and among women Dhavi, Damali, Jaki, and Siti. They have no surnames and no subdivisions. Their family god is Venkataraman. Sometimes Bedars, Rajputs, Dheds, and Musalmans join their parties and dress and trade like them and then they also are called Lavanas. Though they do not marry or eat together, all go by the name of Lavánas. In appearance the Lavánas proper are stout, short, and dark brown. Most of them live in thatched houses. They never live in flat-roofed or tiled houses because they say that one of their ancestors built a fine flat-roofed house and he and his family forthwith died. Their daily food is bread made of wheat or Indian millet, rice, pulse, and vegetables. They also eat the flesh of fish, fowls, and sheep. They are intemperate in the use of intoxicating drinks. The men wear a loincloth or trousers, a shouldercloth, and a rumál or headscarf round which they sometimes tie a belt of red cloth sewn with shells, and hold in their hands a cloth bag fantastically studded with shells. The women wear a gown called phetia from the waist to the ankles, and a bodico called kachli, and fix a scarf called tukdi to the left of the waist. carry it over the right shoulder and head, and allow it to fall loose on the left shoulder. They braid their hair in three places, a main braid behind the head, and another in a small rope-like stripe above each ear. If they are married they fix to each of the small braids a half ball called ghugri made of brass and silk or cotton thread fringes. These balls are the signs of marriage and are always worn on the temples except when they are bathing. In addition p the balls a bell-shaped tube with fringes of silk is tied to the eds of the two small braids. The tube hangs over the cheeks and Moves about and strikes the cheeks while walking. They do not wear glass bangles like other Hindu women, but cover both arms from the elbow to the wrist with brass or ivory rings. Lavánas are honest, hardworking, and orderly, but extremely dirty and untidy. Their main calling is carrying goods on bullocks or asses and labouring when they can find nothing to carry. A few trade in grain. They rank socially as Shudras that is as low class Hindus. A family of five spends about £1 10s. (Rs. 15) a month on food. A birth costs about 4s. (Rs. 2), a boy's marriage about £4 (Rs. 40) including a dowry of £2 (Rs. 20), a girl's coming of age 4s. (Rs. 2), a pregnancy 2s. (Re. 1), and a death 12s. (Rs. 6). Their family god is Venkataraman whose image they keep tied in a bundle in their houses and worship it once or twice a year. They have no guru or spiritual guide and they do not call Brahmans or other priests to their religious ceremonies. At their marriages the caste people meet, the bride and bridegroom are

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rubbed with turmeric and oil, bathed, and decked won fine clothes and ornaments, their heads are knocked together, a feast is given to the caste, and the ceremony is over. The dead are buried, and no funeral rites are performed. Child and widow. marriage and polygamy are practised, but not polyandry. They believe in sorcery, witchcraft, and soothsaying. They are not bound together as a body, do not send their children to school, do not take to new pursuits, and are a falling class.

Lingáyat Vánis.

Linga'vat Va'nis, or Banjigs, returned as numbering about 21,787, are found all over the district. Banjig is the Kanarese form of the word Váni from the Sanskrit vanik a trader. The names in common use among men are Basappa, Khandappa, and Rudrappa; and among women Basamma, Ningamma, and Shivamma. They have no surnames except place or calling names. Their family god is Virabhadra, and their family goddess is Parvati. Both men and women are dark, short, and strongly made. Their home tongue is Kanarese. They live in one or two storeyed houses with walls of mud and sun-burnt bricks, and terraced or tiled roofs. Their house goods include cooking vessels, metal plates, cots, a grinding stone, a stone mortar and pestle, and low wooden stools. They are great enters and good cooks and strict vegetarians, neither eating flesh nor drinking liquor. Their daily food is millet-bread, boiled pulse, cooked rice, vegetables, onions, and garlic. They eat from brass plates placed before them on low stools. On holidays in addition to their ordinary food they prepare a variety of dishes, the chief of which are godiluggi or wheat rice molasses and milk boiled together, hulgi or stuffed cakes, as well as the cakes called bundis, kadleus, karchikais, and vades. The men wear a waistcloth, a shouldercloth, a jacket or a long coat, a headscarf, and shoes, and the women a robe and bodice without passing the skirt of the robe between their legs. Both men and women are neat and clean in their dress and have clothes enough both for daily wear and for special occasions. The men wear gold or silver ear and finger rings and the women wear gold car and nose rings, silver or brass toe-rings, gold bracelets, and silver anklets. The women either braid their hair or tie it into knots. They app' black salve to their teeth and tattoo parts of their brows and cheek and their chins, hands, and feet. The print on the brow is a black dot or a crescent with a black dot inside. The marks on the chin and cheeks are simple dots and on the arms single or double snakes. The Banjigs are hardworking, thrifty, hospitable, and clean, but law-going and quarrelsome. Their main calling is trade. Some own land and a few are in Government service. As a class they are well-to-do, few of them being in debt. A family of five spends about £1 10s. (Rs. 15) a month on food. It costs them about £50 (Rs. 500) to build a house and about 4s. (Rs. 2) a month to rent one. A birth costs 16s to £1 12s. (Rs. 8-16), a marriage about £20 (Rs. 200), a girl's coming of age about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, and believe strongly jut the . saying, sorcery, and ghosts. The chief object of the fied and the Shiv in the form of the ling which both men and wfites are persilver box from the neck. The ling which is gent the thirteenth covered with a paste of powdered slate emedians as bound together

waistbands, and glass bangles. They are hardworking, honest, even-tempered, and orderly, but dirty and untidy. Their main calling is husbandry. They work in the fields from morning to They generally grow rice and when the rice crop is cut sow some vegetable. Their women help in the field and their children tend cattle. A family of five spends about £1 (Rs. 10) a month on food and about £1 10s. (Rs. 15) a year on clothes. A hut costs about £1 (Rs. 10) to build and 6d. (4 as.) a month to ront. The value of their house goods including cattle is about £20 (Rs. 200). A birth costs about 4s. (Rs. 2), a son's marriage about £10 (Rs. 100) of which £2 (Rs. 20) go to the girl's father, a girl's coming of age about £1 (Rs. 10), a pregnancy about 1s. (8 as.), and a death about £2 (Rs. 20). They are religious, respect Brahman's, and call them to conduct their marriage ceremonies. Their funeral rites are performed by men of their own caste. They make pilgrimages to Kadari and Tirupati in Madras. Their spiritual teacher lives at Tirupati. He does not try to make new followers. They believe in sorcery, witchcraft, and soothsaying. When a child is born its navel cord is cut and the child and mother are bathed. On the eleventh day they clean the house, bathe, and are purified. thirteenth the child is named and cradled. A day or two before a wedding, a dinner is given in honour of the family gods, and the bride and bridegroom are rubbed with turmeric and bathed. On the wedding day the bride and bridegroom are scated on a blanket, the Brahman repeats verses and throws red rice over the couple, and a feast without flesh is given to caste-people. Next day the bride and bridegroom are scated on a horse and carried through the chief streets in procession, and the marriage is over. When a Kamati dies the body is carried to the burial ground in a

Kudavakaliga'rs, or Hoemen, are returned as numbering about 7694 and as found all over the district. They are said to be called Kudavakaliga'rs from the iron field-hoo or kudav. They speak impure Kanarese. The names in common use among men are Basappa, Mallappa, and Ningappa; and among women Basava, Kallava, and Ningava. They have no surnames. Their family-gods are Basavana, Virabhadra, and Vellava. Basavana's chief shrine is at Ulvi in North Kanara, Yellava's at Savadatti in Belgaum, and Virabhadra's at Rachoti i. .ne Madras district of Kadapa. They have two divisions Taddodi and Dandavati who cat together but do not intermarry. They are tall, strong, and muscular. They live in neat but rather dirty flat-rocifed houses and keep cows, oxen, and buffalces, and sometimes one or two farm servants on 4s. to 6s. (Rs. 2-3) a month. They are great enters and bad cooks. Their daily food is Indian millet bread, vegetables, and buttermilk, and their holiday dishes are sweet cakes, rice, and milk. They do not use flesh or intoxicating drinks. The men

bamboo car adorned with flags and plantain leaves, and is buried. Child and widow marriage and polygamy are allowed, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by castemen and any one neglecting such decisions is put out of caste. They do not send their boys or girls

to school, take to no new pursuits, and are a falling class,

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dress in a loin and shouldercloth, a jacket, a headscarf, short trousers ending a little above the knee, a blanket, and sandals. The women dress in a robe and bodice, but do not pass the skirt of the robe between the feet. Their holiday dress is the same, but of better and costlier materials. The men wear ear and finger rings, and the women ear. nose, and toe-rings, waistbands, glass and silver bangles, and silver armlets. They are hardworking, honest, even-tempered and Their main calling is husbandry. They work every day from morning till evening except on Monday which is sacred to their god Basav. The women help in the field and the children tend cattle. They are skilful workers. Some are landholders and others field labourers. Their women sell butter, milk, and curds. the produce of their cows and she-buffaloes. They are a well-to-do class, generally free from debt, seldom borrowing except to meet marriage expenses. A family of five spends about £1 (Rs. 10) a month on food and £2 10s. (Rs. 25) a year on clothes. A house costs about £40 (Rs. 400) to build and about 4s. (Rs. 2) a month Their house furniture is worth about £30 (Rs. 300). A birth costs about 10s. (Rs. 5), a son's marriage about £15 (Rs. 150) of which £8 (Rs. 80) is paid to the girl's father, a coming of age about £1'(Rs. 10), a pregnancy about £1 (Rs. 10), and a death about £1 10s. (Rs. 15). They are religious and respect both Bráhman and Lingáyat priests. They call a Bráhman to conduct their marriages and a Lingáyat to conduct their funerals. They keep the leading Bráhmanic holidays. On every Tuesday in the month of Ashadh or July-August their women worship the goddess Gulkava, and in the first half of the month of Shrávan or August-September the goddess Changalkava is worshipped. The Jeshth or June-July full-moon is called Karhunvi and is held in great honour. The day before the full-moon, Indian millet is boiled, made into thick gruel, and given to working bullocks; and on the full-moon day eggs are broken and mixed with oil and forced down the bullocks' throats. They are dressed in rich blankets or woollen cloths, decked with flowers, and have their horns painted red. In some cases rich husbandmen put their women's silver anklets on the bullocks' legs. All the husbandmen meet together taking their white and red but not their black bullocks, and go in procession half a mile out of the village. A hemp rope is tied across the village gates about ten feet from the ground. The husbandmen form a return procession with the bullocks in front, and race their bullocks at top speed towards the village gutes. If a white bullock is first to enter the gates, the white Indian millet crop will be plentiful, and if a red bullock wins the red Indian millet crop will be plentiful. The owner of the winning bullock is allowed to break the rope across the glate with his whip, a ceremony which is called karihariyona of the rope-breaking. They do not go on pilgrimage. The village Lilngayat priest is their guru or spiritual teacher and they occasionally ask him to dine at their houses. They worship the village goddesses Dayamava and Durgava and believe in sorcery, witchcraft, and soothsaying. Their religious rites and customs do not differ from those of Lingayats. Child marriage and polygamy are practised, widow marriage is forbidden, and polyandry is unknown. They do not consider that birth, death, or women's sickness causes impurity. They are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste, and if any one disobeys the decisions he is put out of caste. They do not send their boys or girls to school, take to no new pursuits, and are a steady class.

Mara'tha's are returned as numbering about 44,085 and as found all over the district. Between 1675 and 1752 when the great Shivhji and other Marátha chieftains carried their arms into the Karnátak, thousands of Maráthás and Bráhmans followed them and many settled in Dhárwár. The present Marátha population of Dhárwár are the descendants of these people and of others who from time to time followed the conquerors. Their home speech is Maráthi, but they speak Kanarese with the people of the district. The names in common use among men are Sambháji, Santáji, Shiváji, and Suryaráo; and among women Ambábái, Jijábái, Soyarábái, and Yesubái. surnames are Bhoslé, Chaván, Daphalé, Ghárgé, Ghátgé, Gáikwár, Máné, Nimbálker, Sinde, and Thorát. Their chief gods are Khandoba of Jejuri, Vithoba of Pandharpur, and Venkataraman of Tirupati. and their chief goddesses are Ambábhaváni and Tuljábhaváni of Sátára and Mahálakshmi of Kolhápur. They have no subdivisions. They are dark, bold, and muscular. They live in one-storeved houses with walls of sun-burnt bricks and flat or tiled roofs. They are moderate enters and bad cooks. Their daily food is Indian millet bread, pulse, vegetables, onions, and garlic, and their special holiday dishes are sweet cakes made of rice or wheat flour, sugar, clarified butter, and flesh. On the Dasara holiday in October and on other festive occasions they sacrifice a sheep to their goddess Durgádevi and eat its flesh. They use intoxicating drinks. The men wear a loincloth or short trousers coming to the knees, a jacket, a shouldercloth, and a turban, and tie a waistband tightly round the waist. The women wear a robe and bodice but do not pass the skirt of their robe between the feet. Both men and women are clean, neat, and tasteful in their dress having a marked liking for gay colours. They have a good stock of clothes for ordinary wear and for special occasions. The women of rich Marathas do not appear in public and when they go out their hands and faces are completely covered. The Marathas are active, hardworking, intelligent, honest, hot-tempered, hospitable, and spirited. They work as husbandmen. labourers, messengers, constables, and house-servants. trade and a few have risen to high posts under Government. family of five spends about £1 4s. (Rs. 12) a month on food. house costs £20 to £50 (Rs. 200 - 500) to build and their house goods are worth about £5 (Rs. 50). A birth costs about 16s. (Rs. 8), a marriage about £10 (Rs. 100), a girl's coming of age about £3 (Rs. 30), a pregnancy about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, respecting Brahmans, and calling them to conduct their religious coremonies. They keep the usual Hindu holidays and make pilgrimages to the shrines of Vithoba at Pandharpur, Mahabaleshvar at Gokarn in Kanara, and Tuljabhavani Their spiritual teacher is Shankaráchárya the pontiff of the Smart Brahmans. They believe in sorrery, witchcraft, and Chapter III.
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and soothsaying. They do not keep all the sixteen Bráhmanic sanskárs or sacraments. Their chief ceremonies are birth, marriage, coming of age, death, and mind feasts or maháls which are performed with a Bráhman's help. On the maháls or ancestral mind-days they bathe, dress, and offer balls of cooked rice to crows. If the crows eat the food the ancestors are satisfied; if not they are displeased. Child and widow-marriage and polygamy are practised, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by the castemen and any one who disobeys the decision is put out of caste. The authority of the community is said day by day to be failing. They send their boys and girls to school, take to new pursuits, and are a rising class.

Malavárs.

Malavars, or Woodlandmen, a class of Lingáyats, are returned as numbering about 224 and as found in Gadag, Hangal, and Karajgi. They say they are called Malavars because they used to live in the malanad or hilly country. Other Lingayats say, they were called Malayars or the dirty people because they did not keep the rules of the Lingayat religion. The names in common use among men are Basáp pagavda, Ningangavda, and Rudráppagavda; and among women Basava, Gangava, and Ningava. They have no They have two divisions Muskin Malavárs or face hiders, whose women cover their faces like Muhammadans, and Nira Malavárs or water-hiders who cover their water-pots with a cloth when britiging water from a well. They do not differ in appearance from the ordinary local Lingayats. Most live in one-storeyed houses of the better class with walls of brick and tiled roofs. Their daily food is Indian millet bread, rice, pulse, and vegetables and on holidays they eat sweet cakes. They do not use flesh or intoxicating drinks. Their dress does not differ from that of other Lingayats. They are generally eventempered, hardworking, and orderly. Most of them are landholders and village headmen, and some of them trade. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £10 (Rs. 100) to build and 2s. (Re. 1) a month to rent. A birth costs about 8s. (Rs. 4), a son's marriage about £15 (Rs. 150), a girl's coming of age about £1 (Rs. 10), a pregnancy about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, respecting Brahmans and calling them to conduct their marriages. At their marriages the Brahman priest ties yellow threads or kankans round the right wrists of the bride and bridegroom and throws grains of rice over their heads. The rest of the marriage ceremony and all other religious rites are conducted by Lingáyat priests. They have a spiritual teacher who lives in North Kanara and gives them religious instruction. They keep the leading Hindu holidays and believe in sorcery, witchcraft, and soothsaying. All their ceremonies from birth to death are like those of other Lingayats. Child and widow marriage are allowed, but neither divorce nor polyandry. They are bound together by a strong caste feeling. Their social disputes are settled by their castemen and any one who disobeys is put out of caste. They send their children to school, take to new pursuits, and are a steady class.

Radders are returned as numbering 21,529 and as found all over the district. They have soveral divisions as Chitnat, Matmat, Namad, Nurval, and Paknak. Most of them are Lingayats and wear the ling. The members of these subdivisions cat together but do not intermarry. The names in common use among men are Bharmappa, Chandappa, Fakirappa, and Gurappa; and among women Basava, Irakka, Somakka, and Yellamma. They speak Kanarese. In appearance they are dark and muscular. Most of them live in dirty one-storeyed houses with walls of brick and stone. They keep cows, bullocks, and buffaloes. They are great caters and bad cooks. They take three to four meals a day. Their daily food is bread, vegetables, and pulse, and their special holiday dishes are rice, curds, and sweet cakes. They do not use flesh or intoxicating drinks. The men wear short breeches or a waistcloth about seven and a half feet long, a shouldercloth, a headscarf, and sandals. The women wear a robe and a bodice like other low-class Lingáyat women. They are orderly, hardworking, thrifty, and hospitable, but very unclean and untidy. Their main calling is husbandry. Some work as gardeners and labourers and a few are beggars. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs them about £20 (Rs. 200) to build, a birth costs about £1 10s. (Rs. 15), a marriage about £20 (Rs. 200), and a death about £1 10s. (Rs. 15). They are religious. They worship Maruti, Venkatesh, and Yellamma, and are specially devoted to Venkatesh. Most call Jangams or Lingayat priests, and a few call Brahmans to conduct their religious ceremonies. They keep the leading Hindu holidays. On all new-moon days, except the Margashirsh or December new-moon, they offer kadbus or sugar dumplings to the goddess Lakshamava, and taking some of the dumplings and other cooked food to their fields, throw a little to the four corners of heaven and cat the rest. During harvest time they please the goddess Lakshmava by offering her a goat or plantains and cocoanuts. In making these offerings the goddess is worshipped at her house in a stone placed under a tree. This stone is first rubbed with lime-water and then with redlead. They believe in sorcery, witchcraft, and soothsaying. They admit that ghosts abound, but they seldom seek the help of exorcists, having great faith in Hanumán as a guardian and spirit-scaror. When a person is possessed he is made to sit in front of Hannman and his brow is marked with ashes taken from a pot of burning incense placed before the god. It is believed that by this means the evil spirit is driven away. When a child is born its navel-cord is cut and the mother and child are bathed. On the fifth day a feast is given to casto-people and in the evening the goddess Sathi is worshipped and a lighted lamp is waved round her face. The father of the child is not allowed to see the lamp waved. If he sees it they fear that the child and its mother will sicken. On some day between the thirteenth and the thirtieth an unsewn bodice and some sweet cakes are offered to the goddess Sathi as it is believed that for a month after its birth the child is under the control of the goddess from whom comes any sickness from which the child may suffer. When a marriage is settled an astrologer is asked to choose a lucky day. Two or three days

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before the day fixed the bride and bridegroom are rubbed with turmeric and bathed at their homes and a feast is given to friends and relations. Next day the bridegroom is led to the bride's where his relations pile a large heap of rice on a blanket. In front of the heap a platter, a lamp, and the ornaments to be given to the girl are placed; at each corner of the heap a half cocoanut is set and round the heap a line of turmeric powder is drawn. Two women whose husbands are alive come each with a platter on which is a lamp, wave the lamp round the heap, and burn incense before it. They take the lamps of the platters and fill them with rice from the heap, and then set the lamps on the rice. They carry the platters to the girl's house-shrine throwing rice on either side as they go, and set the platters before the house-god. When this is over the bridegroom's party return home. On the wedding day the bridegroom, wearing a rich dress and scated on a bullock, goes with music, friends, and relations to the kride's house. The bride and bridegroom are made to stand in two bamboo baskets filled with rice in which a copper coin is placed. A white sheet with a central turmeric cross is held between them. The priest ties cotton threads to the right wrist of the bridgeroom and to the left wrist of the bride and repeats sacred verses. He tells the bridegroom to touch the lucky thread or mangalsutra and ties it round the bride's neck and throws grains of rice on the heads of the pair. Betelnuts and leaves are handed among the guests, a feast is given to the castemen, and the wedding is over. Of the Radders those who are Lingáyats bury their dead and the rest burn them. If the dead is burnt, on the third day the ashes are gathered and thrown into water, and on the ninth, tenth, or eleventh the clothes of the dead are washed and set near the house-gods with the deceased's ornaments, and cooked food is offered to them. To the spirit of the headman of a family an offering of food is made every month after his death. The images of the dead are worshipped along with the house-gods and once a year a headscarf or a waistcloth, or a robe if the deceased was a woman, are offered to the images of the dead. Some do not allow their widows to warry, and others allow widows and divorced women to marry once. A few send their boys to school. They do not take to new pursuits and on the whole are a steady class.

knák Radders.

PAKNAK RADDERS are found scattered all over the district. They form a subdivision of Radders. Their home tongue is Telugu, but out of door; they speak an impure Kánarese and Hindustáni. Their names are the same as those of other Rádders. Their family deities are Hanumán, Hulgeva, and Yellamma. The chief shrine of Yellamma is at Savadatti in Belgaum and of Hulgeva near Hospeth in Bellári. Though they are Hindus they dress somewhat like Musalmáns. The men dress in a long cloth about four feet broad round the waist, and taking a second cloth tie its two ends behind the neck and let them fall loosely in front. They throw a long cloth over the head, allowing the ends to fall on both shoulders, and over that they wear a long piece of cloth round the head like a turban. The women dress in a robe and bodice without passing the skirt of the robe between the feet. The men wear ear and finger rings and wristlets, and the women wear nose, ear, and toe rings, a necklace, and glass bangles.

They live in thatched houses which are generally dirty and ill-cared for. They are great caters and bad cooks. Their daily food is Indian millet bread, pulse, and vegetables, and on helidays they eat rice and flesh. They use intoxicating drinks and are intemperate in their habits. They are even-tempered, dirty, and idle. Their main calling is begging from door to door. When they go on their begging rounds they carry a palm-leaf book bound by a thread passed through holes made in the leaves. Figures of men, children, bullocks, horses, trees, and other fauciful objects are engraved on the leaves as well as mysterious Telugu verses. They hold an iron pin in their hands, and when any one wishes to know his fortune they tell him to put the pin in the book. When the person has put the pin in the book the Radders open the book and interpret the meaning of the figure painted on the leaf. A snake means death, a scorpion misfortune. a mange or a plantain good luck. A few till lands and labour for hire. A family of five spends about 8s. (Rs. 4) a month on food. hut costs about £1 (Rs. 10) to build and their house goods are worth about 10s. (Rs. 5). A birth costs about 2s. (Re. 1), a marriago about £3 10s. (Rs. 35), and a death about 1s. 6d. (12 as.). They do not respect Brahmans or call them to their marriages which are conducted by men of their own caste. They do not worship Brahmanic gods and do not keep the usual Hindu holidays. Their spiritual teacher is a Lingayat priest named Virabikshayati who lives in Kattikeri in Bangalore. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child the midwife cuts its navel-cord, and puts a few drops of castor-oil into its mouth. On the third day the goddess Sathi is worshipped, caste-people are feasted, and the child is laid in a cloth cradle and named. No further rites are performed till marriage. The day before the wedding they offer food to their family goddess, and on the wedding day five women whose first husbands are alive make the bride and bridegroom sit on a blanket, throw red rice over the pair, wave lighted lamps round their faces, and say So soban that is Happiness to the bride and bridegroom. Caste-people are feasted on liquor and bhing and the wedding is over. The dead are buried. On the next day cooked rice, the flesh of a fowl, liquor, and bhing are offered at the grave to the spirit of the dead. Some once a year offer boiled rice and flesh to the spirits of their dead ancestors. Those who do so are supposed to get children, wealth, and prosperity. Child and widow marriage and polygamy are allowed, but not polyandry. are bound together by a strong caste feeling. Their social disputes are settled by men of their caste and any one who disobers the decisions is put out of caste. They do not send their children to school, take to no new pursuits, and on the whole are a falling class.

Rajputs are returned as numbering about 3150 and as found all over the district. They say that their ancestors were Kshatriyas who added to their names the word sinha or lion latterly corrupted into sing; and that they formerly lived in Upper India, and came to Southern India as soldiers and military adventurers. They speak Hindustani at home and impure Kanarese with the people of the district. The ordinary names among men are Bhavansing, Gangaram, Govindsing, and Parasharamsing; and among women Bhavanibai, Gangabai, Sundra-

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bái, and Tulsábái. They have no surnames. Their family deities are Venkataraman or Báláji of Tirupati and Durga. They have several subdivisions the particulars of which are not known. It is said that when they settled in Southern India some Rajputs kept or married local women and that their issue formed the clans of Chaváns, Pavárs, and Jádhavs who afterwards became heads of powerful Marátha families. They have golras or family-stocks and a boy and girl of the same stock cannot intermarry. They are tall, robust, fair, and handsome. Most of them live in one-storeyed houses of the better class with walls of brick and tiled roofs. The houses are clean and well-cared for. They are great eaters and bad cooks. Their daily food is Indian millet or wheat bread, pulse, vegetables, and clarified butter; and their special holiday dishes are sweet cakes made of wheat, sugar, clarified butter, almonds, raisins, and spices. They do not drink liquor. Unlike other Hindus they use iron pincers to keep their cooking vessels on the hearth and to take them off the hearth. The men wear a loin and a shouldercloth, a jacket, a waistband, a turban, and shoes; and the women wear a robe and a bodice without passing the skirt of the robe back between the feet. On festive occasions women wear a petticoat and a scarf called chungi, one end of which is fixed to the waist on the right, brought under the left arm-pit from behind the back, carried over the right shoulder and head, and allowed to fall loose on the left arm. Women wear false hair and shoes when they go out, but they do not appear in public. Both mon and women are neat, clean, and tasteful in their Rajput men and women wear the same ornaments as other Hindus, except that the shapes are Upper Indian shapes. The nose-ring of the local upper class Hindu women is about an inch and a half in diameter, while the Rajput nose-ring is about six inches in diameter. Part of the ring passes through a hole in the left nostril and part is lifted up and tied by a string to the hair above the The Rajputs are honest, hardworking, brave, hottempered, hospitable, and orderly. Their main calling is to serve Government or private persons as constables, watchmen, and messengers. Lately many have taken to husbandry. They complain that they can find no work suited to their strength, honour, or tastes. Their caste position is at the foot of the Kshatriyas. They eat from the hands of Gaud Brahmans only. A family of five spends on food about £1 (Rs. 10) a month, and on clothes about £3 (Rs. 30) a year. A house costs about £10 (Rs. 100) to build, and 2s. (Re. 1) a month to rent. Their house furniture is worth about £5 (Rs. 50). A birth costs about £1 (Rs. 10), a thread-girding about £2 (Rs. 20), a daughter's marriage about £30 (Rs. 300) including the dowry to the bridegroom, a girl's coming of age about £1 (Rs. 10), a pregnancy about £1 10s. (Rs. 15), and a death about £5 (Rs. 50). Their family priests are Gaud Brahmans, and they call them to conduct their ceremonies. A Gaud Brahman bairági acts as their spiritual teacher, giving them religious instruction and getting presents of food and money. The teacher tries to make new followers. keep the sixteen sanskárs or sacraments like Brahmans. marriage and polygamy are allowed, widow marriage is forbidden, and polyandry is unknown. They are bound together by a strong casto feeling. Their social disputes are settled by their spiritual teacher. They send their boys and girls to school, and are a steady class.

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Stdars.

Sa'dars are returned as numbering about 43,422 and as found all over the district. They say that their name is a corrupt form of the word sádhu or saint. They eat only with high-class Lingáyats such as Silbalkis and Panchamsális. They never marry out of their own class. They wear the ling and allow divorce and widow marriage. They do not eat flesh or drink liquor. Shiv is their god and the Lingáyat priest belonging to the Rotti religious house is their religious head, whom they often invite to dine with them. They bathe twice a day and worship the ling. They dress like other Lingáyats, their women wearing the robe like a petticoat. They are husbandmen, traders, and village headmen. Their marriage ceremonies are performed either by a Bráhman astrologer or by a Lingáyat priest. They sometimes fast on Monday till sunset. They bury their dead.

Craftsmon, according to the 1881 census, included sixteen classes with a strength of 47,585 or 6.10 per cent of the Hindu population. The details are:

Dharvar Craftemen, 1881.

Division,	312164	Fe- malea	Total	Divisios.	PoleIC	Pe. males	Total
Badiges or Carpenters Gasandes or Massins Hugars or Flower Fellers Higers or Falm Tappers Jaigars or Gold-westers Jingars or Suddres Kammars or Blacksmiths Killikitsirs or Chatris Kumbhars or Foters	60.2 1.23 52.43	23 CT 25 EE	2013 6000 1726 1250 2 400 1.17 445 2 61	Idd Ruryavanshis Medara Alghis or Lingayat Dyers Funchit Shinpis or Tailors Sora, are or Goldsmiths Funchit Koravara. Total	723 379 1054 9240 8224 1050	833 1125 8595 3370	2103

" Not in the census returns.

Badiges, or Carpenters, are returned as numbering about 2000, and as found all over the district. They are old settlers in Dharwar. They speak impure Kanareso. The names in common use among men are Ballappa, Bassappa, and Kallappa; and among women Dayamava, Kallava, and Lakshamava. They have no surnames, and they are known by the names of the towns and villages in which they live. Their family deities are Dayamava, Kallava, Mallava, and Manava. They have no subdivisions. They are fair, short, strong, and muscular. They live in houses of the better class with walls of mud and sun-burnt bricks. Their daily food is Indian millet bread, rice, vegetables, and cards; and their special holiday dishes are sweet cakes. They do not use flesh or intoxicating drinks. The men wear a loin and shouldercloth, a jacket, a turban, and shoes; and the women a long robe and bodice passing the skirt of the robe back between the feet. Both men and women are neat and clean in their dress. The men wear ear and finger rings and waistchains, and the women car nose and toe rings and waisthands. They are hardworking, honest, even-tempered, hospitable, and orderly. Their main calling is to build houses and to prepare wooden field-tools. They also do the petty iron work required for house use as making

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Badiger.

locks, hinges, and sickles. Some make idols of sandalwood and teakwood. They work from six to twelve in the morning and from two to six in the evening, and are helped by their children. Their busy senson is from December to May. Their craft is prosperous and few of them are in dobt. A family of five spends about 16s. (Rs. 8) a month on food. It costs about £10 (Rs. 100) to build a house and about 2s. (Re. 1) a month to rent one, and the value of their house goods is £5 (Rs. 50); a birth costs about £1 (Rs. 10), a thread-girding about £5 (Rs. 50), a marringe about £10 (Rs. 100), a girl's coming of ago about £2 (Rs. 20), a pregnancy about £1 10s. (Rs. 15), and a death about £2 (Rs. 20). They are religious and respect Brahmans, but do not call thom to their religious ceremonies. All their religious ceremonies are conducted by priests of their own caste. They keep the usual Hindu holidays, and make pilgrimages to Gokarn in Kanara and Shirsangi in Belgaum. Their spiritual teacher called Gurappayya lives at Yatgiri in the Nizam's country. Occasionally they worship the village goddesses Dayamava, Durgava, and Yellamma. Their family-godde-s Kallamma is represented as a woman sitting on a raised seat with four arms, each holding a separate weapon. They say that they do not believe in sorcery, witchcraft, or soothraying. Of late they have begun to keep the sixteen Brahmanical sanskirs sacraments which under the Peshwa's government were forbidden them. When a child is born its navel-cord is cut and the mother and child are bathed. On the fifth day the goddess Jivati is worshipped, and food is offered her, and on the twelfth day the child is named and cradled. They have lately begun to perform all religious ceremonies like Brahmans with the help of priests of their own class Child marriage and polygamy are practised, widow marriage is forbidden, and polyandry is unknown. They are bound together as a body. Their social disputes are settled by their teacher and castemen, and any one who disobeys their decisions is put out of caste. They send their children to school, take to new pursuits, and are a steady class.

Garandis

Gavandis, or Masons, orasthey call themselves Sagarchakravartis that is Sea-rulers, are returned as numbering about 6000 and as found all over the district. They speak impure Kanarese. The names in common use among men are Bassanna, Timmanna, and Yellappa; and among women Bhimova, Sarova, and Savakka. They have neither surnames nor family-stocks. Some classes among them go by particular hames as Badagus, Dannanavurs, and Kannanavurs. A boy and girl of the same class cannot intermarry. They are of two divisions Trinamadharis and Pakutras, the members of which ent together and intermarry. Their family gods are Venkataraman of Tirupati and Hanuman. They are tall, dark, and slender. Most of them live in houses of the better sort with walls of sun-burnt bricks and flat or tiled roofs. They are great enters but bad cooks. Their daily food is Indian millet bread, pulse, and vegetables, and their special holiday dishes are sweet cakes. They use flesh and liquor. The men wear a loin and shouldercloth, a jacket, a headscarf, and shoes; and the women wear a robe and a bodice without passing the skirt of the robe back between the feet. The men wear ear and finger rings, and the women ear finger and nose rings, and

wristlets. They are hardworking, even-tempered, and orderly, but dirty and untidy. Their main calling is working as masons in building houses, bridges, temples, and ponds. They spend large sums on marriages, and though their craft is prosperous many are A family of five spends about £1 10s. (Rs. 15) a month on food. A house costs about £7 10s. (Rs. 75) to build and about 6s. (Rs. 3) a year to hire. A birth costs about £1 10s. (Rs. 15), a son's marriage about £25 (Rs. 250) including £5 (Rs. 50) paid to the girl's father, a girl's coming of age about £2 (Rs. 20), a pregnancy about 16s. (Rs. 8), and a death about £2 10s. (Rs. 25). They are religious, respect Brahmans, and call them to conduct their marriages. They worship the usual Brahmanic gods and make pilgrimages to the sbrine of Venkataraman at Tirupati. Their spiritual teacher is Tátáchárya who lives at Hampi in Bellári. He gives a sacred thread to such of them as wish to wear it and brands them on the arm with a copper discus or chakra. They believe in sorcery, witchcraft, and soothsaying. As soon as a child is born its navel cord is cut and the mother and child are bathed. On the fifth day the goddess Sathi is worshipped and on the twelfth day the child is named and cradled. Their marriage ceremonies last four days. On the first day a dinner is given in honour of the family gods; on the second day the bride and bridegroom are rubbed with turmeric and oil and bathed; on the third day a Brahman priest is invited, repeats texts, and the regular wedding ceremonies are gone through; and on the fourth day the bride and bridegroom are made to sow seeds of five grains in the marriage shed. The dead are either burnt or burned. A birth, monthly sickness, and death cause impurity for ten, four, and ten days. They are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste and any one who disobeys the common decision is put out of caste. Caste authority grows weaker day by day. They send their boys to school, take to no new pursuits, and on the whole are a steady class.

Huga'rs, or Lingayat Flower-sellers, are returned as numbering about 1700 and as found in Bankapur, Gadag, Hubli, Karajgi, Navalgund, Ranebennur, and Ron. They speak impure Kanarese. The names in common use among men are Basappa, Kallappa, and Nagappa; and among women Basava, Gursava, and Irava. They have no divisions and no surnames. Their family-gods are Rachana They do not differ in appearance from ordinary and Basavana. Lingayats. They live in flat-roofed houses which for the most part are neat and clean, and keep flower-plants in their yards. Their daily food is Indian millet bread, pulse, and vegetables, and their special dishes are rice and sweet cakes. They do not use flesh or liquor. The men wear a loin and shouldercloth, a jacket, a headscarf, and sandals; and the women a robe and bodice without passing the skirt of the robe back between the feet. They are honest, even-tempered, and orderly, but lazy. Their main calling is to sell flowers and flower garlands and bel or Ægle marmelos leaves. Every morning they bring flowers and distribute them among Lingúyats each of whom in return gives them a small dole of grain. Their women help them in their work. Some of them till land. Their calling is poorly paid and many are in debt. A family of five spends about Chapter III.
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£1 (Rs. 10) a month on food; a house costs about '£10 (Rs. 100) to build and 2s. (Re. 1) a month to rent, a birth costs about 4s. (Rs. 2), a son's marriage about £10 (Rs. 100) including £4 (Rs. 40) paid to the bride's father, a girl's coming of age about 6s. (Rs. 3), and a death about £1 (Rs. 10). They are religious, respecting Lingsyat priests, and calling them to conduct their religious ceremonies. Their guru or spiritual teacher is a Lingáyat priest who lives at Chitaldurg in Maisur. They keep the leading Hindu holidays and occasionally worship the village godesses Dayamava and Durgava. They believe in sorcery, witchcraft, and soothsaying. Their birth. marriage, and death ceremonies are like those of other Lingáyats. Child and widow marriage, divorce, and polygamy are practised, and polyandry is unknown. They are bound together by a strong caste feeling. Minor social disputes are settled by their priests; and graver questions by their guru or spiritual teacher. They do not send their children to school, take to no new pursuits, and on the whole are a steady class.

Ngerus.

Ilgerus, or Palm-Tappers, are returned as numbering about 1250 and as found in Dhárwár, Bankápur, Gadag, Hángal, Karajgi, Kod, Navalgund, and Ron. Ilgeru is said to be a corrupt form of Ilsoavaru the Kánarese for a palm-tapper. They speak impure Kánarese. The names in use among men are Dharmayya, Mollayya, and Ramayya; and among women Basava, Mahava, and Parava. They have no They are of four divisions, Kaudanya, Kátunya, and Váschalya. The first and second eat and marry with each other, but the first and second neither eat nor marry with the third and fourth. They are like other Lingayats except that they mark their brows with a circle of sandalwood paste. They are short, slender, dark, and strong. Most of them live in houses of the better class, one storey high, with walls of brick and tiled roofs. The houses are generally clean and well cared for. They are great eaters and good cooks. Their daily food is rice, pulse, Indian millet bread, clarified butter, and milk, and their special holiday dishes are sweet cakes made of wheat, pulse, and coarse sugar. They eat the flesh of sheep and fowls but of no other animal. They drink no liquor because they are prevented by the curse of the goddess Párvati. The men wear a headscarf, a loin and shoulder cloth, a jacket, and shoes; and the women a robe and bodice. like those worn by Lingayat women. They are honest, hardworking, even-tempered, neat, clean, hospitable, and orderly. Their main calling is to draw and sell palm-juice, and a few are engaged in They are busy during the fair season and idle during the rains. They rank below Lingáyats and among middle-class Hindus. A family of five spends about £1 10s. (Rs. 15) a month on food and about £3 (Rs. 30) a year on dress. A house costs them about £20 (Rs. 200) to build and about 4s. (Rs. 2) a month to rent. The value of their house goods is about £10 (Rs. 100). A birth costs them about £1 (Rs. 10), a marriage about £20 (Rs. 200), a girl's coming of age about £1 (Rs. 10), a pregnancy about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious. Their family gods are Basavana, Hanuman, and Yellava. They call both Brahmans and Lingayats to conduct their marriages and their other

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ceremonies are performed by Lingáyat priests. Their principal holidays are Ugadi in April-May, Nag-panchami in August-September, Ganesha-chaturthi in September-October, Dasara in October-November, Diváli in November, and Holihunavi in March-April. They make pilgrimages to the shrine of Sangameshvar at Kudla about twelve miles from Hangal. Their guru or spiritual teacher is a Lingáyat priest named Ajayya who lives at Nidsingi about eight miles from Hangal. He gives them religious instruction and They occasionally worship the village in return receives presents. goddesses Dayamava and Durgava by offering them flowers, sandal paste, perfumes, fruit, and uncooked food. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child honey is dropped into its mouth and its navel cord is cut, and on the fifth day the goddess Sathi is worshipped to secure long life to the child. On the thirteenth day a Lingayat priest is called. He blesses the child and its mother and gives her some fruit, and in return is given money and uncooked food. The child is put into a cradle and named by its paternalaunt. Both Bráhman and Lingáyat priests are called to their marriages. The Brahman priest makes the bride and bridegroom stand in two baskets filled with rice and holds a cloth between them. Five married women whose first husbands are alive throw red rice over the couple, the Lingayat priest ties kankans or yellow threads round the right wrists of the bride and bridegroom, and two lighted lamps set in a plate containing red water are waved round their faces. A feast is given to members of the caste and the marriage is over. After death the Linguyat priest comes and sets his right foot on the head of the body. The foot is worshipped and the body is carried sitting in a vimán or car to the burial ground. As the carriers draw near the burial ground two men come from the grave to the car and ask, Who are you? and Where are you going? The mourners answer; It is Rámayya Mollaya who is going to Shiv's heaven. The two men lay a cocoanut in the car and say, Come. bearers move on to the grave. The body is taken out of the car and set in the grave. The Lingayat priest repeats charms, throws bel leaves and earth on the body, and the grave is filled. The priest stands on the grave, his feet are worshipped, and all go home. No further funeral ceromonics are observed. Eight years ago the Ilgerus used to burn their dead, but lately, under the advice of Linguyat priests, they have begun to bury. A birth, a girl's coming of age, or a death causes no impurity. They pay special respect to all lings whether in temples or in houses, but do not wear the ling round their necks like the Lingáyats. They are bound together by a strong caste feeling. Their social disputes are settled by members of their caste and Lingayat priests, and if any one disobeys a common decision he is put out of caste. An outcaste may rejoin if he pays a fine of 10s. (Rs. 5) and drinks charantirth or water in which a priest's feet have been washed. They send their boys to school, take to new pursuits, and are a steady

Jalga'rs, apparently Watermen, that is Gold-washers, are returned as numbering only two and as found in Rauebennur. Several other families who are gold-washers by descent have probably been

Jalgárs,

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Jalgdrs.

returned under some other name. They speak impure Kanarese. The names in common use among men are Kállappa, Mállappa, and Rangappa; and among women Adiveva, Basava, Fakirava, Kallava, and Yellava. They have no surnames. Their house gods are Basappa, the river Ganga, and Huligova. They have no subdivisions. They are short, strong, and muscular. They live in dirty untidy and ill-cared for houses with flat roofs and walls of brick and mud. They keep oxen, fowls, and dogs. They are great eaters and poor cooks. Their every-day food is Indian millet bread and vegetables, and their special holiday dishes are sweet cakes, rice, and vegetables. They eat flesh and drink liquor. The men wear a head-carf, a jacket, a shouldercloth, a loincloth, and a blanket; and the women wear a robe and a bodice, without passing the skirt of the robe back between the feet. They wear flowers in their hair. Their clothes are made in the local handlooms and they generally have one or two suits for holiday wear. The men wear dar and finger rings, and the women nose ear and too rings, and waistbands. They are hardworking, even-tem-pered, and orderly, but unclean and untidy. They wash the dust in goldsmiths' shops for particles of gold, and the sands of the gold-yielding streams in the Kapoti hills. They can practise goldwashing in the Kapoti streams only during a few months in the cold weather and evoin when at work make little more than the wages of a day-labourer. I Their craft is falling and they are in debt. They eat from all higher class Hindus but not from Musalmans, Holayas, or Mádigárs. A family of five spends about £1 (Rs.10) a month on food and about £1 10s. (Rs.15) a year on dress. A house costs about £4 (Rs. 50) to build and 2s. (Re. 1) a month to Their household goods are worth about £5 (Rs. 50). A birth costs about 4s. (Rs. 2), a son's marriage about £10 (Rs. 100) including £2 104. (Rs. 25) paid to the girl's lather, a girl's coming of age about £2 (Rs. 20), a prognancy about 8s. (Rs. 4), and a death about 16s. (Rs. 81). They are religious. Their family deities are Yellava, Huligeva, and Hanamappa. They have no family-priests. They respect Brahmans and call them to conduct their marriage ceremonies. They keep the I lindu holidays of Holihunvi in March-April, Ugadi in April, Dasarde in October, and Diváli in November. They make pilgrimages to Wellamma in Belgaum and to the Musalman tomb of Raja Bagovar thee saint of Yamnur in Navalgund. They worship the village deities Dayamava and Durgava, and say they do not believe in witchcraft, sorce ry, or soothsaying. They do not keep the regular Hindu sacrament is or sanskurs. On the birth of a child they cut its navel-cord; on the fifth they worship the goddess Kállamma, give a caste dinner, and a sacrifice a sheep at the temb of Raja Bagovar the Pir of Yamnur , and on the twelfth cradle the child. On the first day of a mar riage they rub the bride and bridegroom with turmeric. On the second day they give a caste dinner. On the third day they, set the bride and bridegroom on a horse and carry them through the town with great pomp. On the death of a man or woman, they carry the dead body to the burning ground, set it on the piles of wood or cowdung cakes, and burn it. Childmarriage and pd. lygamy are allowed, and polyandry is unknown. The

heads of widows are not shaved but they are not allowed to marry again. They are bound together by a strong caste feeling. Social disputes are settled by the caste people and if any one breaks their rules he is put out of caste, They eke out a living as labourers and are a poor class.

Jinga'rs, or Saddle-makers, also called Chitragars or Painters, are returned as numbering about 400 and as found in Dhárwár, Gadag, Hubli, Kod, and Ranebennur. Their home speech is Marathi and they speak Kanarese with the people of the district. The names in common use among men are Dhondiba, Krishnappa, and Ramappa; and among women Bhágirathi, Ganga, and Sarasvati. Their surnames are Amblékar, Kamblékar, Khaprekar, and Topekar. Boys and girls of the same surname do not intermarry. Their family goddess is Nimshadevi whose chief shrine is in Maisur. They have no subdivisions. They are short and fair. They live in houses of the better class with tiled or flat roofs. Their daily food is Indian-millet bread, rice, pulse, and vegetables, and their special holiday dishes are sweet cakes. They neither eat flesh nor drink liquor. The men wear a loin and shouldercloth, a jacket, a turban or headscarf, and shoes; the women wear a robe and bodice like Bráhman women. They are hardworking, hospitable, and orderly. They work as carpenters, tailors. blacksmiths, painters, and saddle-makers. The women do not help the men in their work. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £30 (Rs. 300) to build, and their house goods are worth about £10 (Rs.100). A birth costs about £1 (Rs. 10), a thread-girding about £5 (Rs. 50), a marriage about £25 (Rs. 250), a girl's coming of age about £2 (Rs. 20), a pregnancy about £1 (Rs. 10), and a death about £5 (Rs. 50). They are religious, respect Brahmans, and call them to conduct their religious ceremonies. Their spiritual teacher is called Shankar Bhárati. They make pilgrimages to Pandharpur and Gokarn. They profess not to believe in sorcery, witchcraft, or soothsaying. They keep the sixteen Brahman sanskars or sacraments. Child-marriage and polygamy. are allowed; widow marriage is forbidden, and polyandry is unknown They send their children to school, take to new pursuits, and are a

Kamma'rs, or Blacksmiths, are returned as numbering about 1200 and as found all over the district. They speak Kánarese as well The names in common use among men are Fakirappa Hanamappa, Havlappa, and Yellappa; and among women Bhimava, Fakirava, Hanmava, and Kállava. They have no surnames except place names. Their house goddess is Kallava whose chief shrine is at Shirsangi near Ramdurg in Belgaum. They have no divisions. They are dark and strong. They live in one-storeyed flat-roofed houses, generally small and ill-cared for. In front of each house is a large veranda in which they make many iron articles. moderate eaters and bad cooks. Their every-day food includes rice bread, vegetables, clarified butter, curds, and milk; and on holidays they use flesh. They drink all kinds of liquor and some are intemperate; some wear top-knots and others shave the crown of the head. They shave the beard, but keep the moustache. The women tie the hair into a back knot and deck their hair

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with flowers. The men dress in a loincloth, a shouldercloth, a coat, a headscarf, and a pair of sandals; and the women in a robe and bodice without passing the skirt of the robe back between the feet. men wear ear-rings of brass or false pearls and brass or silver finger rings, and the women wear silver armlets, ear and nose rings, and waistbands. They are honest, hardworking, even-tempered, and hospitable, but unclean. Their main calling is making iron tools. They work from morning till evening except two hours' rest at midday for a meal and a sleep. Their women and children help in their work. Their carnings amount to about 6d. to 1s. (4-8 as.) a day. Their calling is steady but some are in debt. A family of five spends about 16s. (Rs. 8) a month on food. A house costs about £10 (Rs. 100) to build and their house goods are worth about £1 10s. (Rs. 15). A birth costs 8s. (Rs. 4), a marriage about £10 (Rs. 100), a girl's coming of age about 16s. (Rs. 8), and a death about 16s. (Rs. 8). The are very religious, respecting Brahmans, and calling them to conduct their marriages and other ceremonies. They worship the ordinary Brahmanic gods, keep the usual Hindu holidays, and make pilgrimages to Pandharpur, Tuljápur, and Kolhápur. They have no spiritual teacher. At home they worship the image of Kallamma and the images of their ancestors, and on holidays sacrifice a sheep to Kállamma. They believe in sorcery, witchcraft, and soothsaying. They keep none of the sixteen Brahmanic sanskars or sacraments. On the twelfth day after birth a child is named and cradled. Nothing further is done till marriage. On the wedding day the bride and bridegroom are dressed in fine clothes, a dandi or flower chaplet is tied round the bride's head, and a báshing or brow-horn is tied round the bridegroom's head. They are scated on a raised seat, the village astrologer throws red rice over them, the bridegroom ties the mangalsutra or lucky thread round the bride's neck, and betel is served to the guests. The astrologer is paid about 2s. (Re. 1). The bride and bridegroom are seated on horseback and taken in procession to a Hindu temple with music. They bow to the god and return home. Friends and relations are feasted and the marriage is over. The dead are burnt. They are bound together by a strong caste Social disputes are settled by the castemen, and any one who disobeys the common decision is put out of caste, and allowed back on paying a fine of 10s. (Rs. 5). Some send their children to school. They take to no new pursuits and are a steady class. Killikiatars or Chhatris are returned as numbering about

Killikiatars.

Killikiatars or Chhatris are returned as numbering about 445, and as found all over the district except in Hubli and Navalgund. They speak Maráthi at home and Kánarese abroad. The names in common use among men are Dakalya, Fakirana, Gidya, Shettenna, and Yella; and among women Basakka, Hulagakka, Kállamma, and Mugakka. Their common surnames are Allak, Pachange, and Sinde. Persons having the same surname do not intermatry. The name of their chief god is Bhadmana, and of their chief goddesses Hulgemma and Yellamma, whose shrines are at Hulgi near Hospeth in Belláriand at Savadatti in Belgaum. They are of two subdivisions Minahidiyo and Gombiadiso. The Minahidiyos make their living by catching and selling fish, and the Gombiadisos by playing with leather

dolls behind a curtain. They do not eat together or intermarry. In appearance they are strong, stout, muscular, and dark like ordinary lower-class Hindus. They live in dirty ill-cared for mat huts. Their house goods include a few earthen pots, one or two brass plates, a drum which they use in their plays, and a large box with six or seven dolls. They keep sheep and fowls. They are great eaters and bad cooks. Their every-day food is Indian millet bread, gruel of rough Indian millet flour, vegetables, salt, onions, and garlic. Their special holiday dishes are animal food and liquor. They eat fish, fowls, deer, and hares, but no other animals. All drink liquor and some to excess. The men wear a loin and shouldercloth, a short coat, a blanket, and a headscarf; and the women a robe and bodice. They have no stock of good clothes either for ordinary wear or for special occasions. The men wear brass ear and finger rings and waistchains, and the women wear copper or brass ear, finger, and toe rings and silver arm and wristlets. The women do not mark their foreheads with kunku or redpowder. The Chhatris are hardworking but dirty and hot-tempered. Their main calling is showing leather dolls of various shapes all naked and indecent. These dolls are placed behind a curtain with a lamp close by. man sits near, explains the movements, and beats a drum. The motions and the explanations cause much laughter among the spectators, but are so indecent that Government have forbidden the performance in public places. Since their show has been stopped some have begun to work as field labourers. A family of five spends about 16s. (Rs. 8) a month. A house costs them about 10s. (Rs. 5) to build, and their house goods are worth about 4s. (Rs. 2). A birth costs about 4s. (Rs. 2), a marriage about £5 (Rs. 50), a girl's coming of age 4s. (Rs. 2), and a death about 10s. (Rs. 5). They keep the leading Hindu holidays, and call men of their own caste not Brahmans to conduct their religious ceremonies. They believe in sorcery, witchcraft, and soothsaying. When a child is born its navel cord is cut, on the fifth day friends and relations are feasted, and on the seventh day the child is named and cradled. The day before a wedding day a sheep is sacrificed to their goddess Hulgeva, and friends and relations are feasted on the flesh. On the wedding day the bride and bridegroom are rubbed with turmeric and oil and bathed in warm water. A bashing or marriage-coronet is tied round the head of the bridegroom and a dandi or flower bonnet round the head of the bride. They are seated on an altar and grains of red rice are thrown over them. They are then taken to a temple where they throw themselves before the god, offer cocoanuts and betel nuts and leaves, and the marriage is over. The dead are either burnt or buried according to the means of the deceased's relations. Child marriage, widow marriage, and polygamy are allowed, and polyandry is unknown. They are bound together by a strong caste Their social disputes are settled by their headman or ganáchári who is also their priest. They do not send their children to school, take to no new pursuits, and are a falling class.

Kumbha'rs, or Potters, are returned as numbering about 2650, and as found all over the district. They are old settlers in Dharwar and are Lingayats by religion. They speak impure Kanarese. The

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names in common use among men are Guráppa, Sidappa, and Viráppa; and among women Basava, Chinava, and Nagava. They have no surnames. Their house-gods are Basavana, Ishvar, and Virabhadra. The shrine of Basayana is at Ulvi and of Ishvar at Gokarn both in North Kanara; f'irabhadra's shrine is at Rachoti in Bellari. have no subdivisions. They are dark, strong, and muscular. They live in tiled as fell as flat-roofed houses with walls of sun-burnt bricks and mud. They keep one or two asses to carry mud and litter. Their daily food is Indian millet bread, vegetables, chillies, and buttermilk, and their special holiday dishes are rice and sweet cakes. They neither eat flesh nor drink liquor. The men wear a loin and a shouldercloth, a short cost, and a hendscarf, and a blanket during the cold and wet months. The women wear a robe and bodice without passing the skirt of the robe back between the feet. They have no stock of clothes for special occasions. Both men and women wear a ling and apply ribbuti or white cowdung ashes to their brows. They are hardworking, honest, even-tempered, and orderly, but proverbially dirty and so ignorant that Kumbhar is a local name for a dullard. Their main calling is making tiles, bricks, and various earthen vessels. They work from morning till dark in the rainy season and from morning till eight at other times. They are helped by their women. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs them about £10 (Rs. 100) to build, and their house furniture is worth about £5 (Rs. 50). A birth costs about £1 (Rs. 10), a marriage about £10 (Rs. 100), a girl's coming of age about 10s. (Rs. 5), a pregnancy about £1 (Rs. 10), and a death about £1 10s. (Rs. 15). They are religious, respecting Lingayat priests and calling them to their religious coremonies. They keep the leading Hindu holidays. Their spiritual teacher is a Lingayat priest who lives at Chitaldurg in Maisur. They believe in sorcery, witchcraft, and soothsaying. When a child is born its navel-cord is cut, and on the twelfth day it is named and cradled, and a feast is given to Lingayat priests and to the caste-people. The day before a wedding the bride and bridegroom are rubbed with turmeric and bathed, and a caste feast is given. On the wedding day the bride and bridegroom are scated on a four-cornered altar, a red and white vessel half-filled with water and beteinut is set at each corner of the seat, and a Lingayat priest repeats verses and throws red rice on the couple. Next day a caste feast is given and the ceremony is over. After death the body is placed sitting and decked with flowers, ornaments, and redpowder. It is set in a car-shaped bier and carried to the burial ground by four men. About sixty years ago all classes of Hindus used to come to the houses of potters and bring either images of earth or raw earth to make images. On such occasions people used to bring enough dry provisions to keep a man his wife and two children for a day, or 3d. to 6d. (2 to 4 as) in cash, an unsewn bodice, and turmeric and redpowder. They gave these things to the potter and asked them to give them the required earthen pots, images, or clay. The potters worshipped the pots, images, and clay and handed them to the people who carried them in procession to their houses. At present as Jingars and goldsmiths prepare excellent clay images people

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prefer buying from them than from potters. The occasions when people used to bring clay images from the potters were, on the last day of the month of Jeshth or June-July when a pair of earthen bullocks were brought from the potters and worshipped; on the last day of Ashadh or July-August when an image of the goddess Divasi Gavri was bought and worshipped; on the bright fourth of Shravan or August-September when one are more images of snakes were brought from the potter's and worshipped; on the bright sixth of the same month, when an earthen image of the faithful servant of the king Sahadev one of the five Pandavs was brought from the potter's and worshipped; on the dark eighth of Shravan or August-September, when an image of Krishna was bought; on the bright fourth of Bhadrapad or September October, when the image was of Ganpati; and on the full-moon of Ashvin or October-November, when the image was of Sigi Gavri or the new crop goddess, were brought from the potter's and worshipped. On seven occasions pots and raw clay are still brought from the potters, on the full moon of Falgun or March-April, the Jingars bring earth from the potters and make images of the god Kam which they sell to people; on the first Friday of Shravan or August-September a small earthen pot with a lid is brought from the potter's, the face of the goddess Lakshmi is drawn with red and yellow on the shutter which is placed on the pot, the neck of the pot is adorned with ornaments and the pot is worshipped by Bráhman women on every Friday up to the eighth of the month of Bhadrapad or September-October; on the bright eighth of Bhadrapad or September-October another pot is brought from the potter's, decorated in the same way, and called Jeshta Lakshmi or the elder sister of Lakshmi, this is placed near the former pot and worshipped; at the beginning of a thread-girding or a marriage, especially among Bráhmans, several pots are brought from the potters and one of them is called Avighna Kalash or the guardian pot and is worshipped; at the beginning of a Lingayat wedding eight pots are brought from the potter and worshipped in honour of their family deities. Before the beginning of the festival of Durga the goddess of cholera five earthen pots are brought from the potter's and given to five members of the village community, the gavda or headman, the head cultivator, the talvar or watchman, the barika, and the holaya or the messenger, who worship the pot till the festival is over. When cholera breaks out in a village the village potter is asked to make an image of the goddess of cholera. When the image is ready the village people go in procession to the potter's house and tell the potter to carry the image to a spot outside of the village. When the image is taken to the spot named it is first worshipped by the potter and then by the villagers, food is offered to it, and the food is eaten by all the villagers present. Child and widow marriage and polygamy are practised, but polyandry is unknown. They are bound together by a strong caste feeling; social disputes are settled by a majority of their castemen and any one who disobeys their decisions is put out of caste. They do not send their children to school, take to no new pursuits, and on the whole are a steady class.

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CRAFTSMEN.
Lad Suryavanshis.

La'd Suryavanshis, a class of Butchers, are returned as num. bering about 1470 and as found all over the district except in Kod. They speak impure Hindustáni. The names in common use among men are Bábu, Divánji, Maddana, and Margana; and among women Balava, Lachmava, Rajava, and Yellava. They have no surnames. Their family-goddesses are Durgava and Hulgava whose shrines are found all over the district. They have no subdivisions. They are rather fair, strong, and muscular. Their features are regular, the face oval, the eyes large, the nose high, the lips thin, the cheek-bones low, and the cheeks gaunt. They live in thatched and sometimes in tile-roofed houses which are generally dirty and ill-cared for. Their daily food is rice, Indian millet bread and gruel, and vegetables, and their special holiday dish is flesh. They drink liquor and some take hemp-water or bháng and opium. The men wear a loin and shouldercloth, a jacket, a waistband, and a headscarf; and the women wear a robe and a bodice. The men wear ear and finger rings, and the women ear, finger, and nose rings and bracelets. Their main calling is killing sheep and selling the flesh. Their profits have been reduced by enforcing orders against the sale of damaged flesh. A family of five persons spends about 16s. (Rs. 8) a month on food, and about £2 (Rs. 20) a year on dress. A house costs about £5 (Rs. 50) to build and about 1s. (8 as.) a month to rent. A birth costs about £1 4s. (Rs. 12), a marriage about £5 (Rs. 50), a girl's coming of age about 6s. (Rs. 3), and a death about 16s. (Rs. 8). They are religious, respecting Brahmans, and calling them to their marriages. They make pilgrimages to the shrine of Yellamma at Savadatti in Belgaum and to the tomb of a Musalman saint named Daval Málik at Navalgund in Dhárwár. They have no spiritual teacher and they profess not to believe in sorcery, witchcraft, or soothsaying. As soon as a child is born its navel cord is cut and a few drops of castor-oil are dropped into its mouth. On the fifth a sheep is killed and a few friends and relations are feasted, and on the thirteenth the child is named and cradled. No further ceremony is observed till marriage. On the wedding day the bride and bridegroom are seated on an altar, the village astrologer repeats verses and throws yellow rice on the pair, the bride and bridegroom rub each other's brows with turmeric, lighted lamps are waved round their faces, a feast is given to friends and relations, and the ceremony is over. After death the body is washed, set in a sitting posture, and decked with new clothes, flowers, and orna-It is carried on a bier to the burial-ground and buried. On the third day after death milk is taken to the burial-ground and poured on the grave. If the death occurs on an unlucky day the house in which the death took place is abandoned for three months. its doors being closed with bunches of thorns. It is believed that if the family lived in the house some fresh evil fortune would fall on them. Child marriage and polygamy are allowed, widow marriage is forbidden, and polyandry is unknown. They are bound together by a strong castle feeling. Social disputes are settled by the elders of the community and any one who disobeys their decision is put out of caste. They send their boys to school, take to no new pursuits, and on the whole are a falling class.

Medars, or Basket-makers, are returned as numbering about 1070 and as found all over the district. They speak impure Kanarese. The names in common use among men are Adiva. Rajáppa, and Yelláppa; and among women Basava, Kállava, and They have no surnames except place names. family goddess is Yellamma whose chief shrine is at Savadatti in Belgaum. There have no subdivisions. They are short, dark, and weak. Their features are irregular, eyes small, nose high, lips thin, cheek-bones low, and cheeks gaunt. They live in dirty and ill-cared for thatched or tiled houses. Their daily food is millet and vegetables and they occasionally eat flesh and drink liquor. Their dress does not differ from that of other local Hindu labourers. The men wear a loin and shouldercloth and a headscarf; and the women wear a robe and bodice. The men wear finger rings of brass and copper and earrings of false pearls, and the women wear ear and nose rings of false pearls and armlets and toe rings of bellmetal. They are hardworking, honest, and even-tempered. but neither clean nor orderly. Their main calling is bamboo basket and mat making. They work eight or ten hours a day and are helped by their women and children. Though their craft is steady most are in debt. A family of five spends about 14s. (Rs. 7) a month on food. A house costs about £6 (Rs. 60) to build and about 6d. (4 as.) a month to rent. A birth costs about £1 4s. (Rs. 12), a marriage about £15 (Rs. 150), a girl's coming of age about £2 (Rs. 20), and a death about £2 (Rs. 20). They are religious, respecting Brahmans and calling them to conduct their marriages. They have a guru or spiritual teacher named Gurusiddhasvámi who lives at Hubli. They occasionally offer a sheep to their goddess Durga. They believe in sorcery, witchcraft, and soothsaying. On the thirteenth day after birth the child is named and friends and relations are feasted. During her first pregnancy a woman is given a new robe and bodice, her head is decked with flowers, and she is taken to the temple of Basappa to bow to the god. After death the body is placed sitting and the chief of a Lingayat religious house comes and sets his foot on the corpse's head. The body is taken to the burial ground and buried. They are bound together by a strong caste feeling. Social disputes are settled by men of the caste and any one disobeying their decisions is put out of caste. They send their boys to school, take to no new pursuits, and are a steady class.

Na'mdev Nila'ris, or Indigo-dyers, are returned as numbering about 500 and as found in Hubli, Karajgi, Kod, Navalgund, Ránebennur, and Ron. They speak Kánarese. The names in common use among men are Hanamáppa, Námdeváppa, and Tukáppa; and among women Bhágava, Shántava, and Subava. Their surnames are Bagade, Basme, Nadari, and Paste. Their family gods are Venkoba and Vithoba and their goddesses Bhaváni and Yellamma. They have no divisions. They do not differ in appearance from other local labourers. They live in ordinary onestoreyed houses with walls of sun-burnt bricks and flat or tiled roofs. They are moderate eaters and bad cooks. Their daily food is Indian millet bread and gruel, rice, chillies, and vegetables, and their

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CRAFTSMEN.

Numder Nildris.

special holiday dishes are sweet cakes and flesh. They dripk liquor and some of them hemp-water, opium, and tobacco. The men wear a loin and shouldercloth, a jacket, and a headscarf, and the women a robe and bodice. They are hardworking, thrifty, and hospitable, but dirty. Their main calling is to dye yarn with indigo and prepare it for the weavers. Some of them also weave. They suffer from the competition of other local dyers. They work from morning till ovening except two or three hours at noon for dinner and rest. Their women help in the work. They do not work on ordinary Hindu holidays. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs 200) to build, and the value of their house goods is about £5 (Rs. 50). A hirth costs about £1 (Rs. 10), a marriage about £10 (Rs. 100), a girl's coming of age about 8s. (Rs. 4), and a death about £1 10s. (Rs. 15). They are religious, respecting Brahmans and calling them to conduct their religious ceremonics. They go on pilgrimageto Pandharpur and Gokarn. Their guruor spiritual teacher is a man of their own caste, who is called Nagnath. He travels from place to place giving religious instruction and his followers support him. He does not try to make fresh converts. They believe in sorcery, witchcraft, and soothsaying. Child and widow marriage, divorce and polygamy are practised; polyandry is unknown. They are bound together by a strong casto feeling. Their social disputes are settled by their caste-people and any one disobeying their decisions is put out of caste. Caste authority is day by day growing weaker. They send their children to school, take to no fresh pursuits, and on the whole are a steady class.

AT HYLIAD.

Na'gliks, a sect of Lingayat dyers, are returned as numbering about 2200, and as found all over the district except in Kalghatgi. Their home speech is Kanarese. The names in common use among men are Parappa, Rudrappa, and Sidappa; and among women Gangava Gurava, Satava, and Irbasava. They have no surnames. Their family gods are Basavána, Shaukar, and Virabhadra. They have no subdivisions. In appearance they do not differ from other local Lingáyats. They live in dirty ill-cared for houses of the better class with walls of sun-burnt brick and flat roofs. They are moderate cators and bad cooks. Their daily food is Indian millet bread, rice, pulse, and vegetables, and their special holiday dishes are cakes of wheat flour, pulse, and coarse sugar. They neither cat flesh nor drink liquor. Their dress and ornaments are the same as those of other Lingayats. They are hardworking and orderly, but dirty. Their main calling is to dye yarn and prepare it for weavers. Some of them till and others work as labourers. Their women and children help them in their work. As day-labourers are well paid, every man earning about 1s. (8 as.) a day. of them are in debt. A family of five spends about £1 (Rs. 12) a month on food. A house costs about £10 (Rs. 100) to build. A birth costs about 8s. (Rs. 4), a son's marriage about £10 (Rs. 100) including £3 (Rs. 30) paid to the bride's father, a girl's coming of age about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, respecting Lingayat priests and calling them to conduct their religious ceremonies. They keep the leading Hindu holidays. Their teacher is Murgisvámi who lives at Chitaldurg in Maisur. They believe in sorcery, witchcraft, and soothsaying, and consult exorcists when any member of the family falls sick or when any misfortune befalls them. Their birth, marriage, and death ceremonies do not differ from those of other Lingáyats. They are bound together by a strong caste feeling. Their social disputes are settled by men of the caste, and any one who disobeys their decisions is put out of caste. Caste authority is day by day growing weaker. They send their children to school, take to new pursuits, and on the whole are a rising class.

Pa'ncha'ls, numbering about 18,000, are found all over the They are said to get their name because they include the five crafts of Kammararu or blacksmith, Radigeru or carpenter, Kanchgararu or bellmetal maker, Kalkutkaru or stonecutter, and Agasalera or goldsmith. They eat and marry with each other, but with no other class. They use mutton and liquor, and live on millet, rice, wheat, pulse, vegetables, sugar, milk, and curds. Their chief object of worship is Kalikadevi or Kallamma; some also worship Hanuman. Their high priest is an ascetic who lives at Yátgiri near Sirpur in the Nizám's country. Their religion and family observances differ little from those of Brithmans. dead are burnt except the chief priest who is buried. They have their own priests who perform all their religious rites. Among some Panchals widow-marriage is not allowed. Poverty, necessity, religious disputes, and the pride of their priests, have forced many Panchals to form subordinate communities with priests of their own. Except that they do not obey the old priests or cat with their old castefollows, and that they allow widow-marriage and divorce, their customs do not differ from those of the main body of Panchals. The members of each of their subordinate classes eat and marry among themselves only. As a class the Panchals are short, fair, wellfeatured, and hardy. They speak Kanarese and very few are able to read or write. Their chief religious books are the Nagarkhand, and Padmabhukhand, and parts of the Skandapurán. The men wear the waistcloth sometimes folded and tucked like the Brahman waistcloth; the women wear the bodice and the robe either drawn through the legs in Brahman fashion or hanging like a petticoat. In former times some of the Panchals were famous craftsmen, and there are still very skilful workers among them. As a class they are wellto-do.

Shimpis, or Tailors, are returned as numbering about 6580 and as found all over the district. They are divided into two classes, Namdev Saimpis and Lingáyat Shimpis or Shiv Shimpigárs. Namdev Shimpis are found all over the district. They speak Maráthi at home and Kánarese abroad. The names in common use among men are Narsáppa, Svámiráo, and Vithobáppa; and among women Ganga, Rádha, and Rukhmái. Their surnames are Jádhav, Kotháre, and Songaji. They have no subdivisions. In appearance they are rather fair and strong and like Maráthás. They live in flatroofed houses with walls of mud and sun-burnt bricks. Their daily food is Indian millet bread, rice, pulse, and vegetables; and their chief holiday dishes are sweet cakes and flesh. They are excessively

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Shimpis

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Shimpis.

fond of intoxicating drinks. The men wear a loin and shouldercloth a jacket, a coat, and shoes; and the women wear a robe and bodice. On holidays they wear better and costlier clothes. In character they are hospitable and even-tempored, but proverbially dishonest. Their main calling is to sew coats, waistcoats, caps, and other articles of dress. They work daily from seven to twelve and from two to six, and are helped by their women. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs. 200) to build, and 2s. (Re. 1) a month to rent. A birth costs about £1(Rs. 10). a marriage about £20 (Rs. 200), a girl's coming of age £2 (Rs. 20), a prognancy about £1 (Rs. 10), and a death about £5 (Rs. 50). They are religious, respect Brahmans, and call them to conduct their religious Their family god is Vithoba of Pandharpur. They coremonies. keep all Hindu holidays. They have two spiritual teachers named Bodhalábáva and Tuljáharanbáva. Bodhalábáva is much stricter in demanding the homage of his followers than Tuljaharanbaya. During the Navarátra or the nine nights' festival in the month of Ashvin or October-November they offer liquor and flesh to their goddess Bhavani. They believe in sorcery, witchcraft, and sooth-saying. They keep some of the sixteen Brahman sanskars or When a child is born its movel cord in cut and the sacraments. mother and the child are bathed. On the fifth day the goddess Sathi is worshipped and a feast is given to friends and relations, and on the twelfth day the child is named and cradled. The dead are burnt and (the family of the deceased remain impure for ten days. Every year in the month of Bhadrapud or September-October they keep a mind or memorial feast in honour of their dead They are bound together by a strong caste feeling. ancestors. Minor social disputes are settled by their caste-people and graver questions by their spiritual teachers. They send their children to school, take to new pursuits, and are a rising class.

Shiv Shimpigars are a class of Linguyat tailors. They speak Kanarese. The names in common use among men are Basappa, Kallappa, and Rudrappa; and among women Gurbasava, Irava, and They have no surnames. Their family doities are Rachana and Virabhadra whose chief shrines are at Gadag in Belgaum and at Rachoti near Kadapa in Madras. They have no subdivisions. In appearance they do not differ from ordinary local Lingayats. They live in flat-roofed houses with walls of mud and sun-burnt bricks. The houses are neat, clean, and well-cared for. They are moderate enters and bad cooks. Their daily food is Indian millet bread, chillies, vegetables, and buttermilk, and their special holiday dishes are rice and sweet cakes. They use neither flesh nor liquor. The men wear a loin and shouldercloth, a coat, a headscarf, and sandals; and the women a robe and bodice without passing the skirt of the robe back between the feet. They have no good stock of clothes for ordinary wear, but they keep one or two sets of new clothes for special occasions. The men wear gold earrings and gold or silver finger rings; and the women wear a mugti or pin-like gold nose ornament, necklaces of gold and glass beads, silver armlets, and glass bangles. In character they are eventempered, hardworking, and thrifty, but proverbially cunning and

dishonest.1 Their main calling is sewing coats, waistcoats, caps, and other articles of dress. Their women sew bodices and do house work. A family of five spends about £1 (Rs. 10) a month A house costs them about £10 (Rs. 100) to build and about 2s. (Re. 1) a month to rent. A birth costs about 10s. (Rs. 5), a marriage about £10 (Rs. 100), a girl's coming of age about £1 (Rs. 10), a pregnancy about £1 10s. (Rs. 15), and a death about They are religious, respect Lingayat priests, and call them to conduct their religious ceremonies. Their spiritual teacher is a Lingáyat priest who lives at Chitaldurg in Maisur. They believe in sorcery, witchcraft, and soothsaying, and consult exorcists when any member of their family falls sick or any misfortune befalls them. Their customs and religious ceremonies do not differ from those of other Lingáyats. Child and widow marriage, divorce, and polygamy are practised but not polyandry. They are bound together by a strong caste feeling. Social disputes are settled by their priests and castemen, and any one who disobeys their decisions is put out of caste. They send their children to school. Some of them have begun to take to new pursuits, but on the whole they are a falling class.

Sona'rs, Sonagars or Agasalerus, that is Goldsmiths, are returned as numbering about 2400, and as found all over the district. They form one of the five classes of Panchals. The Sonagars have several family-stocks and persons of the same stock do not intermarry. They speak Kanarese. The names in common use among men are Basappa, Kallappa, and Mallapa; and among women Bhimava, Kallava, and Ramava. Their family deities are Kállava and Bánashankari. They are fair, strong, and muscular. They are moderate eaters and good cooks. Their daily food is rice, Indian millet bread, clarified butter, and curds; and their special holiday dishes are sweet cakes. They profess to use neither flesh nor liquor. The men wear a loin and shouldercloth, a jacket, a headscarf, and shoes; and the women a robe and a bodice. Both men and women are clean and neat in their dress. They are eventempered and hospitable but dishonest. Their main calling is to make ornaments and idols of gold and silver. Some of them sell earthen images of Ganpati and Krishna. They are skilful workers, and are well paid. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs. 200) to build. A birth costs about £1 (Rs. 10), a girl's marriage about £30 (Rs. 300) including a heavy but varying dowry paid to the bridegroom, a girl's coming of ago about £1 10s. (Rs. 15), and a death about £3 (Rs. 30). They are religious though they neither respect Brahmans nor call them to conduct their religious ceremonies. All their ceremonies are performed by men of their own caste. They go on pilgrimage to Shirsingi in Navalgund and to Gokarn in North Kanara. Their spiritual teacher is a man of their own caste who lives at Torgal in Kolhápur. Their family goddess Kállamma is shown as a female

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Sondra.

¹ The proverb is, Sonar Shimpi kullarni Appa; Yanchi sangat nalore bappa, that is My friend, have no dealings with the goldsmith, the tailor, and the villago accountant.

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Sondrs.

sitting on a camel having eight arms each holding a separate weapon. They do not believe in sorcery, witcheraft, or soothsaying. They have lately begun to keep the sixteen Brahmanic sanskars or sacraments. They have composed new religious books in imitation of Brahman books and have increased the number of their priests. Early marriage and polygamy are allowed, widow marriage is forbidden, and polyandry is unknown. They are bound together by a strong caste feeling. Their social disputes are settled by their spiritual teacher named Patadasvámi. They send their boys to school, take to new pursuits, and are a prosperous class.

Sanadi Koravars.

Sanadi Korava'rs who seem in the census to have been included under Keravárs are a small tribe who have been long settled in Dhárwár. They speak incorrect Kánarcse abroad, and at home a mixture of Kanhrese, Telugu, and Tamil. The names in common use among men ard Bhima, Bala, Hanma, Fakira, and Yolla; and among women Bhimaya, Hanamaya, Karaya, Nagaya, and Tipaya. Their surnames are local not tribal. Their house deities are Hanuman and Yellava. Every one of their villages and towns has a shrine of the god The chief shrine of Yellava is in Parasgad in Belgaum. Hanumán. They have two subdivisions Sanadi or clarion-playing Koravárs and Kunch or brush-making Koravars who neither cut together nor intermarry. Koravárs may be known by their black, stout, and ugly faces, and their dirty clothes. They are like Vaddars strong and tall. Most of them live in small one-roomed dirty thatched huts, with no furniture except a grindstone, two or three earthen jars, and a few brass vessels. They keep one or two asses to bring the strong grass called madi from river banks, to make brooms, ropes, and netting for hanging vessels containing milk or curds. They are great enters but poor cooks. Their daily food includes Indian millet bread, pulse, and vegetables. At their caste feasts they eat hare, sheep, and fish, but do not take beef or pork. They are excessively fond of liquor. Some use opium and hemp water or bhang. The men wear a loin and shouldercloth, a headscarf, a jacket, and a pair of shoes. The The dress of both men and women women wear a robe and a bodice. is dirty and untidy. Their holiday dress is the same as their everyday dress except that the clothes are new. The men wear brass ear and finger rings, and the women wear bracelets and a pin-like nose ornament, called mugti. In character they are hot-tempored. idle, dishonest, and dirty. The men play the drum. The women make brooms, ropes, and netting from the madi grass which grows on river-banks. Boys learn music from the age of ten. A skilled musician earns about a shilling (8 as.) a day. Their craft is hereditary. Though the demand for their services is fairly constant and well paid their intemperate habits keep most of them in dobt. Their social position is low about the same as the Vaddars but above the Mhárs and Bedars. They keep the usual Bráhmanic and local holidays. A family of five spends about 16s. (Rs. 8) a month on food and £1 10s. (Rs. 15) a year on dress. A house costs about £5 (Rs. 50) to build and their house goods and cattle are worth about £1 10s. (Rs. 15). The birth of a child costs about 16s. (Rs. 8), a son's marriage about £5 (Rs. 50) including £2 10s.

(Rs. 25) paid to the bride's father, a girl's coming of age about 8s. (Rs. 4), and a death about 12s. (Rs. 6). Their ceremonies are performed by men of their own class and not by Brahmans. They worship the usual local and Brahmanic deities and hold Hanuman in special respect. They never go on pilgrimage and have no teacher or guru. They believe in witchcraft, sorcery, and soothsaying. On the fifth day after the birth of a child a caste dinner is given and the child is laid in a cradle and named. When the child is three months old the goddess Sathi is worshipped and a caste dinner is given. No further ceremony is performed till marriage. Child and widow marriage and polygamy are allowed and polyandry is unknown. Some of them burn and others bury their dead. They are bound together by a strong caste feeling. Social disputes are settled by the men of the caste, and any one who disobeys their decision is put out of caste. The authority of the community shows no sign of declining. They send their boys to school, and take to new pursuits, but on the whole are a falling class.

Manufacturers according to the census of 1881 included nino classes with a strength of 53,667 or 6.86 per cent of the Hindu population. The details are:

Dhármár Manufacturers, 1881.

Division.	Males.	Females	Total.	Division.		Males.	Females	Total
Bilojádars* Devánga or Hatgárs Gánigárs Khatris or Patvegárs Hirekurvinavarus*	2906 11,298 2103	2873 11,201 1957	5779 22,400 4060	Istarcrus * Kur inshetis Sális or Koshtis Shivajogis Total		1175	1179 9350 10 20,576	2354 18,953 22 63,067

* These eastes do not appear in the census returns, they are probably included under either Koshtis or Saus.

BILEJADARS a class of Lingáyat weavers seem to have been included in the census under Salis or Koshtis. Their home speech is Kanarese. The names in common use among men are Basáppa, Lingáppa, and Viráppa; and among women Gurbasava, Parvateva, and Virava. They have no surnames. The names of their family gods are Amareshvar, Basavana, and Virabhadra. They have four divisions, Shivashamashetti, Samasali, Pattasali, and Kurvinshetti. The members of these divisions do not eat together or intermarry. They do not differ in appearance from Most of them live in houses of the better ordinary Lingáyats. class one or two storeys high with walls of stones or sun-burnt bricks and flat roofs. Their houses are clean and well-cared for. They are moderate eaters and good cooks. Their daily food is rice, Indian millet bread, onions, garlic, and vegetables; and their special holiday dishes are sweet cakes made of wheat coarse sugar and pulse. They do not use animal food or intoxicating drinks. The men wear a loin and shouldercloth, a short coat, a blanket, and a headscarf; and the women wear a robe and a bodice. The plain end of the robe is tied to the waist, the middle part folded up neatly and tucked to the left of the navel, and the embroidered end is passed from behind the back below the right arm, carried over the left

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MANUFACTURERS.

Bilejadars.

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shoulder and head, and allowed to fall on the right shoulder. The men shave the head clean, and wear the moustache and whiskers. The women either tie their hair into a ball or braid it into a plait. Both men and women mark their brows with ribbuti or white cowdung ashes and wear the ling. The men wear gold car and finger rings and silver waistchains, and the women wear gold armlets, earrings set with pearls, and gold or silver waistbands. They are honest, hardworking, even-tempered, hospitable, and orderly. Their main calling is weaving saris or women's robes and dhotars or men's robes. They work from morning till evening except two hours for meals and rest at noon. They are helped by their women. Their craft prospers and few are in debt. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £50 (Rs. 500) to build and about 4s. (Rs. 2) a month to rent. A birth costs about £1 10s. (Rs. 15), a marriage about £10 (Rs. 100), a girl's coming of age about £1 (Rs. 10), a pregnancy about 10s. (Rs. 5) and a death about £1 (Rs. 10). They are religious, not respecting Brahmans or calling them to conduct their ceremonies, but having their religious ceremonies performed by Lingayat priests. They keep the usual Hindu holidays and go on pilgrimage to Gokarn and Ulvi in North Kánara and to Hampi in Bellári. The guru or spiritual teacher is a Lingayat priest who lives at Chitaldurg They believe in sorcery, witchcraft, and soothsaying. As soon as a child is born its navel cord is cut, and the mother and the child are bathed, and a Lingayat priest ties a small ling to the right arm of the new born child. On the fifth day the knife with which the navel cord was cut, the place in which the cord was buried, and a curry-stone, are worshipped with flowers red powder and turmeric, and a feast is given to friends, relations, and Lingayat priests. On the thirteenth the child is cradled and named by its paternal aunt. In the third month five women whose first husbands are alive take the child and its mother to some Lingayat temples, where coccanuts, plantains, and betchuts and leaves are offered to the idol and all return home. Their marriage rites and customs do not differ from those of other Lingayats. When a married man or woman dies the body is washed with water and placed in a sitting posture. A Linguyat priest comes and sprinkles on the body charanatirth or the water in which his feet are washed and sets his right foot on it and the foot is worshipped. The body is dressed in new clothes and decked with flowers and ornaments. The Lingayat priest reads the Basava Puran for two or three hours during which the friends and relations of the deceased come with perfumes and garlands and throw them round theneck of the dead. The body is placed in a wooden car and carried to the burial ground. As they pass betel leaves, dates, and perfumes are thrown on the body and music is played. At the burial ground the body is set sitting in a niche in the pit dug for it. The mathpati or Lingayat beadle washes the body, rubs on cowdung ashes, and lays flowers, perfumes, and a coccanut before it. Each relation throws a

¹ Details are given under Lingiyat Jangams.

handful of earth on the body and the grave is filled. The Lingáyat priest stands on the grave, his feet are worshipped, and the party go home. They are bound together by a strong caste feeling. Their social disputes are settled by a majority of the castemen under the presidency of Lingáyat priests. Any one disregarding such a decision is either fined or put out of caste. The authority of the community shows no sign of declining. They send their children to school, take to no new pursuits, and are a rising class.

Devaings or Hatgairs a class of weavers are returned as numbering about 5700, and as found in Dhárwar, Gadag, Hangal, Kalghatgi, Kod, Ránebennur, and Ron. They seem to be long settled in the district. Their holy book the Devánga Purán has the following account of their origin. At first both gods and men went naked. In time they began to long for some covering. Gods and men together went to Shiv and prayed him to give them clothes. Their prayer so puzzled Shiv that he fell in a swoon. While in the swoon he saw a man come out of his own body. The man was fierce-looking, wore a loincloth, and a sacred thread, had a necklace of rudráksha beads, and his body was smeared with cowdung ashes. When Shiv recovered from his swoon he found that the vision was true, and that a man in all points as he had seen was standing before him. He called the man Deváng or god-born. Shiv told him to weave clothes for gods and men, and Deváng at once began to weave. The sage Kashyapa was so pleased with Deváng's skill that he gave him his sister Devadatti in marriage. While Deváng was throwing offerings into the sacred wedding-fire a virgin called Agnidatti came out of the fire and espoused him as her husband. From these two wives Deváng had several sons the eldest of whom named Bhánu Govind is said to be the forefather of the Dhárwár Devangs. They are also called Hatgárs a name which they trace to hudga-kararu or ship-mover because they used to make sails. There are two main divisions among them, the Janav Devángs who wear the sacred thread as well as the ling, and the Ling Devángs who wear only the ling. These two main divisions neither eat together nor intermarry. Besides these there are some eighteen minor divisions, the most important of which are Devasális, Nágasális, Padamsális, Pattasális, Shubrasális, and Somasális. These six subdívisions neither eat together or intermarry, nor do the Janav Devángs and Ling Devángs eat or marry with them. Though they neither cat together nor intermarry, the divisions are so much alike and differ so little in customs condition or religion that the same details apply to all. In appearance the Devangs do not differ from ordinary Lingáyats, except that the men mark their brows with sandal wood paste and the women mark theirs with redpowder They speak Kánarese. They live in houses of the better class one or two storeys high with walls of brick and flat or tiled roofs. The houses are clean and well-cared for. They are moderate eaters and good cooks. Their daily food is wheat or Indian millet bread, rice, pulse, and vegetables, and their special holiday dishes are sweet cakes made of wheat, sugar, and clarified butter. They do not use flesh or intoxicating drinks. Their dress

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Manufacturers.

Devángu.

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Devangs.

does not differ from that of other Linguyats except that the women of the Dováng priests pass the skirt of their robes back between their feet and tuck it behind. They are honest, thrifty, hardworking, and hospitable, but quarrelsome. Their main calling is weaving cotton cloth. Some of them trade, and a few lend money. They work from morning till evening except two hours at noon for dinner and a sleep. Their women help in the work. Their calling prospers and few are in debt. A family of five spends about £1 (Rs. 10) a month on food and about £3 (Hs. 30) a year on clothes. A house costs about £20 (Rs. 200) to build and 4s. (Rs. 2) a month to ront. A birth costs about £1 (Rs. 10), a thread-girding about £2 10s. (Rs. 25), a marriage about £15 (Rs. 150), a girl's coming of age about £1 10s. (Rs. 15), a pregnancy about 10s. (Rs. 5), and a death about £1 10s. (Rs. 15). They are religious. Their family gods are Mallikarjuna, Rameshvar, and Virabhadra, and their family goddess is Bánashankari. Sho is also called Shákhámbari because at the great festival held in her honour in the month of Paushya or February-March, one hundred and eight shakhas or vegetables are cooked and offered to her. . The Devángs respect Brahmans and call them to help the Deváng priests who are not versed in religious rules. Their marriage and other ceremonies are conducted by priests of their own class with the aid of Brahmans. They keep all the usual Hindu holidays, and make pilgrimages to all Hindu shrines except the shrine of Yellamma whose son Parashurám is supposed to have killed some of the children of their first ancestor Deváng. They have a guru or spiritual teacher who is called Deváng ISvámi. He lives at Hampi in Bellari, leads a life of celibacy, and does not try to make new followers. They believe in sorcery, witchcraft, and soothsaying. They profess to keep the sixteen sanskars or sacraments like Brahmans, but in practise many of them are not strictly observed. As soon as a child is born a few drops of honey are put into its mouth and its navel cord is cut. On the fifth day the goddesses Jivati and Sathi are worshipped; in the fourth year if the child is a boy its first hair is cut and a feast is given to Deving priests and relations; and in the eighth year the threadgirding is performed. Their marriage ceremonies differ little from those of Madhva Brahmans except that when a thread-wearing Deváng marries the daughter of a ling-wearing Deváng the following ceremonies are performed to cleanse the girl. She is rubbed with carth and white cowdung ashes, a blade of the sacred darbha grass is passed over her head like a razor, she is rubbed with oil, and bathed in warm water. A sacred fire is kindled, offerings are thrown into the fire, the family gods are washed in water, the girl is made to sip a few drops of the water, she is cleansed and fit to marry into a thread-wearing family. Though the thread and lingwearing Devángs intermarry the marriage parties cook and cat separate wedding feasts. The dead are burnt and the funeral rites are gone through with the aid of a priest of their own caste. Birth and death cause impurity for twelve days, and monthly sickness for three days. Child and widow marriage, divorce, and polygamy are allowed and practised, and polyandry is unknown. They are bound together by a strong casto feeling. Social disputes are settled by a

majority of the castemen, and those who disobey are put out of caste. If a Deváng drinks liquor his tongue is branded, he is fined, and allowed back to caste. They send their boys to school, take to

new pursuits, and are a rising class.

Linga'yat Ga'niga'rs, or Oil-makers, are returned as numbering about 22,500 and as found all over the district. They speak Kanarese. The names in common use among men are Basappa, Mallappa, and Ningappa; and among women Basava, Ningava, and Virava. They have no surnames. Their household gods are Basavana and Vira-The chief shrine of Basavana is near Ulvi in Kanara, and of Virabhadra is in Gadag in Dhárwár. They have five subdivisions, Karikuládas, Panchamsális, Padamasális, Sajans, and Sagaradas. The members of these subdivisions cat together and though they do not now intermarry, they differ so little in look, customs, condition, and religion that one account applies to all five subdivisions. They are short, strong, and muscular. They live in dirty, ill-cared for flat-roofed houses with walls of mud and stones. They are moderate eaters and good cooks. Their daily food is Indian millet bread, pulse, oil, and vegetables, and their special holiday dishes are sweet cakes, rice, and clarified butter. They do not use flesh or intoxicating drinks. The men dress in a loin and shouldercloth, a jacket, a headscarf, and shoes; and the women in a robe and a bodice without passing the skirt of the robe back between the feet. Their clothes are of local hand-woven cloth. Both men and women wear the ling, and are generally unclean and untidy in their dress. The men wear ear and finger rings, and the women wear ear nose and toe rings and waistbands. They are hardworking, even-tempered, and hospitable, but dirty and dishonest. Their main calling is pressing and selling oil. They work from morning till evening with two hours' rest at noon. Their busy months are April and May. They do not work on holidays nor on Mondays which they hold sacred to their god Basavana. Their craft is falling as people have begun to use petroleum or rock-oil. A family of five spends about £1 (Rs. 10) a month on food and about £2 10s. (Rs. 25) a year on dress. Including the oil mill a house costs about £50 (Rs. 500) to build and about 4s. (Rs. 2) a month to rent. The value of their house goods is about £20 (Rs. 200). A birth costs about £1 (Rs. 10), a marriage about £20 (Rs. 200), a girl's coming of age about £1 10s. (Rs. 15), a pregnancy about 10s. (Rs. 5), and a death about £2 10s (Rs. 25). They are religious. They do not respect Bráhmans, but call Lingayat priests to conduct their marriage and other ceremonies. They keep all the chief Hindu holidays and go on pilgrimage to Ulvi in North Kanara and to Hampi in Bellari. Their spiritual teacher is Tátadasvámi who lives at Dambal in Gadag. He does not try to make new followers. They worship the village gods Dayamava and Durgava, and believe in sorcerers, witches, and soothsayers, and consult them when sickness or any other misfortune befalls the family. Except in two particulars their religious rites and customs do not differ from those of other Lingayats. They refuse to sell oil to any woman who comes into the shop with dishevelled hair, and if a customer brings a dish with a spoon in it into their shop they keep the spoon but give it back the next

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Lingdyat Gánigárs.

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Hirekurvinavarus.

day. Child and widow marriage and polygamy are practised and polyandry is unknown. They are bound together by a strong caste feeling. Minor social disputes are settled by their caste people and graver questions by their spiritual teacher. They send their boys and girls to school, take to no new pursuits, and are a falling class.

Hirekurvinavarus are returned as numbering about seventy and as found chiefly in Ranebennur. Their home speech is Kanarese. The names in common use among men are Basappa, Kallappa, and Nágáppa; and among women Basava, Mallava, and Nágava. They Their family gods are Basappa, Mailar, and have no surnames. Venkataramana; and their family goddess is Yellamma. They have two subdivisions Hire or Great Kurvinavarus and Chik or Little Kurvinavarus who neither eat together nor intermarry. They are dark, stout, and muscular. They live in flat-roofed, dirty, ill-cared for houses with walls of sun-burnt bricks and mud. Their daily food is rice, Indian millet bread, pulse, and vegetables; and their special holiday dishes are sweet cakes, and the flesh of fowls, sheep, or deer. They use intoxicating drinks. The men wear a loin and shouldercloth, a jacket, and a headscarf, and the women a robe and a bodice. They have no store of clothes for ordinary wear or for special occasions. They are hardworking, honest, hospitable, even-tempered, and orderly but unclean and untidy. Their main calling is weaving dhotars or men's robes and saris or women's robes. They work from morning till evening except a midday rest of two hours. Their women help the men in their work. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs about £20 (Rs. 200) to build and 1s. (8 as.) a month to rent. A birth costs about £1 4s. (Rs. 12), a marriage about £20 (Rs. 200), a girl's coming of age about £2 (Rs. 20), and a death about £3 (Rs. 30). They are religious, respecting Brahmans and calling them to conduct their marriages. On other religious occasions they act as their own priests. They keep the leading Hindu holidays but do not go on pilgrimage to any shrine. Their spiritual teacher is a Lingayat priest named Nilakanthapanavaru. They profess not to believe in sorcery, witchcraft, or soothsaying. As soon as a child is born its navel cord is cut and the child and its mother are bathed. On the fifth day rice is boiled with pulse and five women whose first husbands are alive are fed, and on the tenth day the child is named and cradled. On the twentieth day the mother and five women whose first husbands are alive go to a pond, well, or river, worship the water with redpowder and turmeric, and return home each with a pitcher of water on her head. When a marriage is settled, sheds are raised before the bride's and bridegroom's houses. On the wedding day the bride is brought to the bridegroom's shed, the bride and bridegroom are bathed, dressed in new clothes, decked with flowers and ornaments, and seated on a blanket spread on a cot in the shed. The village astrologer comes and repeats verses and throws grains of red rice on the heads of the pair, lighted lamps are waved round their faces, betelnut and leaves are served among the guests, a feast is given to friends and relations, and the ceremony is over. When a girl comes of age she is made to sit apart for nine days. On the tenth she is bathed, a feast is given to members of the caste, and in the evening she is taken to her husband's room. After death the body is washed, dressed in new clothes, decked with ornaments, and placed in a sitting posture. It is put in a car, carried to the barial ground, and buried. Child and widow marriago, polygamy, and divorce are allowed and practised, polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by a committee of castemen, and any one who disobeys their decision is put out of caste. They do not send their children to school, take to no new pursuits, and are a steady class.

Istarerus a small class of about fifty families seem in the census to have been included under Patvegárs. They are found only in Hubli. They are said to be the illegitimate descendants of Patvegárs. They speak Maráthi at home and impure Kánarese out of doors. The names in common use among men are Ranosa, Tukasa, and Yellása; and among women Ambábái, Gangábái, and Tuljábái. Their leading surnames are Habib, Jadhav, and Pavar. Their family goddess is Ambábái or Tuljábháváni whose chief shrine is at Tuljápur in Satara. They are fair, strong, and muscular. They live in flat-roofed houses with walls of mud and stones. Their daily food is Indian millet bread, rice, pulse, curds, and vegetables; and their special holiday dishes are sweet cakes made of wheat, pulse, and coarse sugar. They cat flesh and drink liquor. The men wear a loin and shouldercloth, a jacket, a long turban, and shoes; and the women a robe and a bodice, without passing the skirt of the robe back between the feet. The men wear ear and finger rings, and the women car, nose, finger, and toe rings, gold and glass bangles, and silver anklets. They are hardworking, honest, hospitable, even-tempered, and orderly. Their main calling is dyeing and selling silk. Some of them weave silk or silk-cotton robes and waistcloths. They work from morning till evening dining and resting for about two hours at noon. Their women help in their work. They rest on the usual Hindu holidays. They are prosperous and free from debt. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs them about £15 (Rs. 150) to build and 2s. (Re. 1) a month to rent, and the value of their house goods is about £20 (Rs. 200). A birth costs about £1 (Rs. 10), a thread-girding about £4 (Rs. 40), a marriage about £15 (Rs. 150), a girl's coming of age about £2 10s (Rs. 25), a pregnancy about £1 (Rs. 10), and a death about £2 10s. (Rs. 25). They are religious. They worship the usual Brahmanic gods and keep the leading Hindu holidays. They respect Brahmans and call them to conduct their marriage and other ceremonies. They make pilgrimages to Tuljapur near Satara. They have a spiritual teacher or guru. They believe in sorcery, witch-craft, and soothsaying. When a child is born its navel cord is cut, a little honey is dropped into its mouth, and the mother and child are bathed. On the fifth day the goddess Sathi is worshipped and five women whose first husbands are alive are fed, and on the twelfth day the child is named and cradled by its paternal aunt. A birth causes impurity for five days. When a boy is five years old his hair is cut, and when eight years old he is girt with a sacred thread.

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At their wedding the bride and bridegroom are rubbed with turmeric and oil and bathed. A Brahman repeats vorses and throws red rice on the heads of the pair, lighted lamps are waved round their faces, betel is handed to the guests, and the bride and bridegroom are made to eat from the same plate. Next day the bride and bridegroom are taken to a temple, and bow to the idol, and this completes the marriage. The dead are burnt. On the eleventh a Brahman purifies the mourning family by giving the men new sacred threads to wear and all of them holy water to sip. Child and widow marriage and polygamy are allowed and polyandry is unknown. They are bound together by a strong caste feeling. A majority of the caste settled social disputes. The guilty are fined 2s. 6d. (Rs. 1-4), bathed, and let back into caste. They send their boys to school, take to no new pursuits, and are a steady class.

Khatris.

Khatris or Patvega'rs are returned as numbering about 4060 and as found in Dhárwár, Gadag, and Karajgi. They say that their proper name is Kshatriya not Khatri, and that they are the descendants of the seven sages Bháradvája, Jamadagni, Kashyapa, Káttiayana, Válmika, Vashishtha, and Vishvámitra. Their home speech is a mixture of Maráthi, Hindustáni, and Kánarese, and out of doors they speak Kánarese. The names in common use among men are Narsingsa, Tuljasa, and Yellasa; and among women Gangabai, Renukábái, and Yellábái. Their common surnames are Baddi, Juturi, Kothare, Mogji, and Pavár. Their family gods are Ganpati and Mahadev, and their family goddesses Tuljábhaváni and Yellamma. They have no subdivisions or family stocks. They are fair, tall, strong, and muscular. They live in common houses, with walls of sun-burnt bricks and tiled or flat roofs. Their daily food includes rice, Indian millet bread, vegetables, onions, and garlic, and their special holiday dishes are sweet cakes made of wheat, pulse, and coarse sugar. They use flesh and are excessively fond of intoxicating drinks. Men wear a loin and shouldercloth, a coat, a headscarf, and shoes; and women a robe and a bodice. Except on ceremonial occasions they do not pass the skirt of the robe back between the The men wear ear and finger rings, and the women ear, nose, finger, and toe rings, necklaces of glass or gold beads, and silver anklets. They are dishonest, hot-tempered, cunning, and given to drink, but hardworking and clean. Their main calling is weaving cotton cloth and dyeing silk. They work from morning till evening with two hours' rest at noon. Their women and children help in the work. Their busy months are August, September, October, and November. Their craft is steady but many are in debt. A family of five spends about £1 4s. (Rs.12) a month on food. house costs about £30 (Rs.300) to build and 2s. (Re.1) a month to rent, and the value of their house goods is about £10 (Rs. 100). A birth costs about £1 (Rs. 10), a thread-girding about £2 10s. (Rs. 25), a marriage about £15 (Rs. 150), a girl's coming of age about £2 (Rs. 20), a pregnancy about £1 (Rs. 10), and a death about £3 (Rs. 30). They are religious. They respect Brahmans and call them to conduct their ceremonies. They keep the leading Hindu holidays and make pilgrimages to Ambábái at Tuljápur in Sátára.

Their spiritual teacher is Shankaráchárya the Smárt pontiff whom they give occasional presents of money. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child a few drops of honey are put into its mouth and its navel cord is cut. On the fifth night the goddesses Jivati and Sathi are worshipped, and on the twelfth day the child is named and cradled. When a boy is eight years old he is girt with the sacred thread. Their marriage and death coromonies differ little from those of Smart Brahmans. Before a marriage a gondhal dance is performed. The dead are burnt and the family is impure for eleven days. They bury boys who die before they are girt with the sacred thread, and girls who They hold mind-feasts on their die before they are married. ancestral death days. On the first of Ashvin or October-November they spread earth on a plantain leaf, lay it before their house gods, and sow five kinds of seed in the earth. On the bright eighth they sacrifice a sheep to Durga. On the tenth, when the scedlings are one or two inches high, their women carry them in pomp to a river or brook and throw them into the water. On the Magha or February-March full-moon the women strip themselves naked in the idol room, tie bunches of nim Melia azadirachta leaves round their waists, walk round the gods, wave lamps and red water, and fall before the gods. Child marriage and polygamy are practised, widow marriage is forbidden, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste and any one disobeying their decision is put out of caste. They send their children to school, take to no new pursuits, and are a steady class.

Kurvinshetis, a class of weavers, are returned as numbering about 1350, and as found in Dharwar, Hubli, Hangal, Kalghatgi, Kod, Navalgund, and Ron. They say they were once Bilejádar Lingayats and left the main casto in consequence of some dispute. They speak impure Kanarese. The names in common use among men are Basappa, Kálláppa and Málláppa; and among women Basava, Ningava, and Yellava. They have no subdivisions. They look like ordinary labourers. They live in one-storeyed houses with walls of sun-burnt bricks and flat roofs. Their house goods include one or two looms and some earthen and brass or copper vessels. They sometimes keep cows and she-buffaloes. They are moderate caters and bad cooks. Their daily food is Indian millet bread, Indian millet-gruel, vegetables, chillies, clarified butter, and milk; and thour special holiday dishes are rice, milk, coarse sugar, clarified butter, and flesh. They drink liquor but not to excess. Almost all chew and smoke tobacco. The men wear a loin and shouldercloth, a short coat, and a headscarf, and the women a robe and a bodice. They have no store of clothes for ordinary wear, but they keep one or two sets of new clothes for special occasions. The men wear gold or brass car and finger rings, and the women silver armlets, wristlets, and waistbands, and a gold nosepin. They are hardworking, honest, even-tempored, and hospitable. Their main calling is weaving robes and bodicecloths, and the coarse loin and shouldercloths worn by the lower classes. The women help the men in their work. Their coarse cloth is in great demand and their calling prospers.

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their work. They are skilful workers and their calling prospers. They do not work on the ordinary Hindu holidays. A family of five spends about £1 4s. (Rs. 12) a month on food. A house costs about £30 (Rs. 300) to build, and about 2s. (Re. 1) a month to rent. A birth costs about £14s. (Rs. 12), a son's marriage about £20 (Rs. 200) including £2 16s. (Rs. 32) given to the girl's father, a girl's coming of age about £2 10s. (Rs. 25), a pregnancy about £2 10s. (Rs. 25), and a death about £1 (Rs. 10). They do not respect Brahmans or Brahmanic gods. They are staunch Lingayats and employ Lingayat priests to conduct their marriage and other ceremonies. They have a spiritual teacher or gurn named Chikkerisvámi who lives at Sultanpur in the Nizam's country. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child its navel cord is cut, a few drops of castor oil are put into the child's mouth, and the mother and the child are bathed. The family is held impure for five days. On the fifth day the midwife sets an image of the goddess Sathi and a curry-stone under the mother's cot, the image is worshipped by the mother, and wet gram is handed to five women whose first husbands are alive. On the sixth day a Lingayat priest comes and lays the child in an eight-sided figure drawn on the ground with white powder, at each corner of the figure he lays a betelout, two leaves, and a copper coin, and setting a ling on the left hand of the child's father or maternal uncle, washes it nine times with sugar, milk, honey, and clarified butter, all the while repeating verses. He winds a white thread one hundred and eight times round the ling, wraps a silk cloth over it, and ties it to the child's neck. The priest touches the child three times with his right foot, and puts it into the mother's lap who bows to the priest. On the thirteenth day the child is cradled and named by its paternal aunt, who is presented with a bodice. On the first day of marriage the bride and bridegroom are rubbed with turmeric and oil, bathed, and a dinner is given to a few Lingayat priests, friends, and relations. The dinner is called arish and auta or the dinner given in honour of the bride and bridegroom. On the second day a dinner called devkáryada uta or the god-dinner is given in honour of the gods, and in the evening caste people meet in the marriage shed and betel leaves and nuts are handed among them. Five married women called adgitterus are chosen to attend on the bride and two men called hattagirerus are chosen to attend on the bridegroom. On the same day the headman of the caste called garda is invited, and presented with five sets of betelnuts and leaves. On the third day the bride's father gives the bridegroom uncooked food, clothes, a brass plate, a drinking vessel, and two small lamps, and the bride and bridegroom are made to sit on a raised seat covered with rice, the Lingayat priest repeats verses and throws red rice over the pair, the lucky thread is tied round the bride's neck, lighted lamps are waved round their faces, and the marriage is over. Next day the bridgroom's two attendants or hattagirerus are presented each with thirty handfuls of rice and Indian millet, thirty betel leaves and nuts, thirty cakes called huplas, and thirty salt relishes called sandagis, and cach of the five bride's-women or adgitterus are presented with fifteen handfuls of rice and Indian millet, fifteen betel leaves, fifteen cakes, and fifteen salt relishes. The dead are buried with rites which do

not differ from those of other Lingáyats.¹ Birth and death cause impurity for five days, and monthly sickness for three days. Child and widow marriage and polygamy are practised and polyandry is unknown. They are bound together by a strong caste feeling. Their social disputes are settled by the men of the caste and any one who disobeys their decisions is put out of caste. They send their children to school, take to no new pursuits, and on the whole are prosperous.

Padamsális speak Kánaresc.² The names in common use among men are Basappa, Hanmappa and Timappa; and among women Bhadmava, Mallava, and Timava. They have no surnames. Their family gods are Hanumáppa and Timáppa, whose shrines are found all over the district. They have no divisions. In look they do not differ from the bulk of the local husbandmen. Most of them live in dirty ill-cared for houses with walls of sun-burnt brick and flat roofs. They are great eaters and bad cooks. Their daily food includes Indian millet bread, rice, pulse, and vegetables, and their special holiday dish is flesh. They use all intoxicating drinks. The men dress in a loin and shouldercloth, a short coat, and a white headscarf; and the women in a robe and a bodice without passing the skirt of the robe back between the feet. The men wear gold or brass car and finger rings, and the women wear the guldáli or lucky marriage necklace, silver armlets and wristlets, and glass bangles. They are hardworking even-tempered and orderly. Their chief calling is handloom-weaving. They work from morning till evening except two or three hours for meals and rest at noon. Their women help in their work. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs. 200) to build. birth costs about £1 (Rs. 10), a marriage about £20 (Rs. 200), a girl's coming of age about £2 (Rs. 20), and a death about £1 10s. (Rs. 15). They are religious respecting Brahmans and calling them to conduct their marriages. They do not employ priests on any occasion except marriage. They keep the regular Brahmanic holidays but make no pilgrimages. Their spiritual teacher is a man of their own caste who lives at Kanchi or Conjeveram in Madras. They worship the god Hanamappa on every Saturday, and believe in sorcery, witchcraft, and soothsaying. Child and widow marriage and polygamy are practised and polyandry is unknown. They are bound together by a strong caste feeling. Their social disputes are settled by their caste people, and any one who disobeys their decisions is put out

Shudded in the census under the general head of Sális. Their

of caste. They send their boys to school, take to new pursuits, and

on the whole are a steady class.

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Patta Salis.

Padamsális.

Shuddha Sális.

Details are given under Jangams.
According to Buchanan (Mysore, I. 256) the Padam Sális tell this story of the origin of their sect. The whole Sáli community formerly wore the ling. A house became haunted by a ghost and the caste were called on to drive him out. All their prayers were of no avail. At last ten of them threw aside the ling, offered prayers to Vishnu, and droveout the ghost. They ever afterwards followed the worship of Vishnu. They formed themselves into a separate community and called themselves Padam Sális perhaps from padma the lotus, one of Vishnu's four weapons,

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Shuddha Sdlis.

home speech is Kánarese. The names in common use among men are Bhimappa, Kariyappa, and Lingappa; and among women Mallaya. Manava, and Saukhava. They have no surnames but place names. Their family gods are Hanuman, Mailar, and Saleshvar. Mailar's chief shrine is in Bellári, and Sáleshvar's at Rathpatti in Kod. They are black, strong, muscular and like local potters. They live in large neat and well-cared for flat-roofed houses with walls of stone and clay. They keep cows and she-buffaloes. They are moderate eaters and bad cooks. Their daily food includes Indian millet bread pulse and vegetables, and their special holiday dishes are sweet cakes, rice, clarified butter, curds, and milk. The men dress in a loin and shouldercloth, a turban and sandals; and the women in a robe and a bodice. They dress in clothes woven by themselves. The men wear ear and finger rings, and the women ear, finger, nose, and too rings, wristlets, necklaces, and glass bangles. They are even-tempered hospitable and orderly but dirty. Their main calling is weaving coarse cotton robes and waistcloths. They work from morning till evening resting for two hours at noon. The women and children help in their work. They are skilful workers and their calling prospers. busy months are August and September. They do not work on ordinary Hindu holidays. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs. 200) to build and 2s. (Re. 1) a month to ront. The value of their house goods is about £15 (Rs. 150). A birth costs about 10s. (Rs. 5), a marriage about £20 (Rs. 200), a girl's coming of age about £1 (Rs. 10), a pregnancy about £1 (Rs. 10), and a death about £2 10s. (Rs. 25). They are religious. They respect Bráhmans, consult them for a lucky day for marriage, and call them to conduct the services. Their other religious ceremonies are performed by men of their own caste. They sometimes worship the village goddesses Dayamava and Durgava, and, on the eighth of dark Bhádrapada or September, they worship their looms and weaving materials. They have no spiritual teacher. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child its navel-cord is cut and the mother and child are bathed. On the fifth day to obtain long life for the child the goddess Jivati is worshipped, and at night four women whose first husbands are alive are made to hold the four corners of the cradle, and the child is named and cradled by its maternal aunt. On the twenty-first day the mother with five other women goes to a well and throws turmeric and redpowder into the water. In the bride's house a day or two before the wedding sugar is handed round and a caste dinner is given, and on the wedding day the bridegroom goes in procession on an ox to the When he comes near the bride's red water is sprinkled over him, he is taken to the wedding hall, and is there made to sit with the bride on a raised seat. A Brahman gives the bridegroom a few drops of milk and clarified butter to sip, holds a cloth between the bride and bridegroom, repeats verses, and throws red rice on their heads. In the evening lighted lamps are waved round their heads, and they are told to sow the seeds of five grains as a sign of prosperity. Next day a caste feast is given and the marriage is over. The dead are either burnt or buried and the family is impure for ten days. On the eleventh some funeral rites are performed. Child

and widow marriage and polygamy are practised and polyandry is unknown. They are bound together by a strong casto feeling. Social disputes are settled by a majority of the caste, and any one who disobeys their decisions is put out of caste. They send their boys and girls to school, take to no new pursuits, and are a steady class.

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Shakuna Bdlis.

SHAKUNA SÁLIS are a small class who are probably included in the census under the general head of Sális. They speak Maráthi at home and Kanarese out of doors. The names in common use among men are Appana, Vankerappa, and Ummana; and among women Basava, Irava, and Nagava. Their house deities are the sháligrám or black stone found in the river Gandaki in Upper India, and the goddess Tuljábhaváni. They are fair strong and muscular. They live in large clean and well-cared for tiled and flat-roofed houses and keep cows and she-buffaloes. They are temperate enters and bad cooks. Their daily food is Indian millet bread, pulse, vegetables, and rice, and their special holiday dishes are sweet cakes made of wheat and coarse sugar. They cat flesh and drink liquor. The men dress in a loin and shouldercloth, a jacket, a headscarf, and shoes; and the women in a robe and a bodice without passing the skirt of the robe back between the feet. They weave their own clothes. The men wear ear and finger rings, and the women car, finger, nose, and too rings, waistchains, anklets, and glass and silver bangles. They do not wear the ling like the Patiasalis. They are honest, hardworking, oven-tempered, hospitable, and orderly, but dirty. Their chief calling is weaving coarse cotton robes and waistcloths. They work from morning till evening with a two hours' rest at noon. Their women and children help in their work. Their craft prospers and they are free from debt. They do not work on ordinary Hindu holidays. A family of five spendsabout £1 4s. (Rs. 12) a month on food. A house costs about £20 (Rs. 200) to build and about 2s. (Re. 1) a month to rent; and the value of their house goods is about £30 (Rs. 300). A birth costs about 8s. (Rs. 4), a marriago about £10 (Rs. 100), a girl's coming of age about £1 (Rs. 10), a pregnancy about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious. They respect Brahmans and call them to conduct their religious ceremonies. They worship the usual local and Brahmanic gods and make pilgrimages to Pandharpur, Tirupati, and Gokarn. They have a spiritual teacher named Lingasvámi who belongs to their own caste, and lives at Airini in Ranebennur. They occasionally worship the village goddesses Dayamava and Durgava. They believe in witches, sorcerers, and soothsayers. On the birth of a child its navel cord is cut and a few drops of honey and castor oil are put in its mouth. On the fifth day the goddess Sathi is worshipped, wet gram is hauded to women, and a feast is given to friends and relations. On the tenth day the house is cleansed and cowdunged and the family bathes and is considered pure. On the thirteenth the child is named and cradled and a casto feast is given. On the first day of marriage the bridegroom's party go to the bride's and present her with clothes and ornaments. On the second day the bride and bridegroom are rubbed with turmeric and oil and bathed, and on the third day a sheep is killed and its flesh and wheat cakes are offered

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to the family gods. Next day which is the chief wedding day the bridegroom is taken in procession to the bride's, and with the bride is seated on an altar. A Bráhman priest holds a cloth between the bride and bridegroom, repeats sacred hymns, and throws red rice over their heads. The married pair are taken to a temple and worship the deity. On their return a caste feast is given and the wedding is over. The rich burn their dead and the poor bury. On the tenth day after death they offer rice balls to the crows in honour of the dead. Child and widow marriage and polygamy are practised and polyandry is unknown. They are bound by a strong caste and apply one who disobeys their decisions is put out of caste. They send their children to school, take to no new pursuits, and are a steady class.

Skivajogis.

Shivajogis, or Shaiv ascetics, are returned as numbering about twenty-two, and as found in Hangal and Hubli. They say they are descended from a Shaiv ascetic. They speak Kanarese at home and Maráthi as well as Kánazese abroad. The names in common use among men are Lakshmappa, Ningappa, and Siddappa; and among women Bhadmava, Jamalava, and Shetteva. Their family gods are Bhairi, Hanuman, and Vithoba. They have no divisions. They are tall and muscular. They live in neat and clean flat-roofed houses with strong walls of stone and clay. They are moderate eaters and bad cooks. Their daily food is Indian millet bread, pulse, vegetables, and curds; and their special holiday dishes are sweet cakes made of wheat pulse and coarse sugar, rice, and clarified butter. They eat flesh and drink liquor often to excess. The men dress in a loin and shouldercloth, a jacket, a headscarf, and shoes; and the women in a robe and bodice without passing the skirt of the robe back between the feet. The men wear ear and finger rings, and the women wear ear, finger, nose, and toe rings, bead necklaces, and glass bangles. They are honest, hardworking, good-tempered, neat, clean, and orderly. Their chief calling is making the combs or reeds used by weavers which are worth about 8s. (Rs. 4) each. They work from morning till evening except two hours at noon for dinner and rest. The women help in their work. They do not work on ordinary Hindu holidays. Their craft prospers and they are free from debt. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £20 (Rs. 200) to build and about 2s. (Re. 1) a month to rent. Their house goods are worth about £10 (Rs. 100), a birth costs about 10s. (Rs. 5), a marriage about £10 (Rs. 100), a girl's coming of age about £1 (Rs. 10), a pregnancy about 4s. (Rs. 2), and a death about 10s. (Rs. 5). They respect Brahmans and call them to conduct their marriages. Their spiritual teacher called Goraknath lives at Benares. They occasionally worship the village deities Dayamava and Dargava. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child the midwife cuts the navel cord and puts a few drops of castor-oil into the child's mouth. On the fifth day the goddess Jivati is worshipped and cooked food is offered to her. On the first day of a marriage the bride and bridegroom are rubbed with turmeric and bathed and yellow threads or kankans are tied to their right wrists. On the second day cooked food is offered to the family gods, and on the third day a Brahman priest makes the bride and bridegroom sit on a raised seat, holds a square piece of cloth between them, repeats verses, and throws red rice on their heads. On the fourth day the bride and bridegroom are carried in procession through the chief streets and the ceremony is over. The dead are buried and the family is impure for ten days. On the third day after death, boiled rice flesh and liquor are offered at the grave, a sheep is killed, and a caste feast is given. Child and widow marriage and polygamy are practised and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by their spiritual teachers, and any one who disobeys their decisions is put out of caste. An offender is let back into caste on paying a fine of £3 (Rs. 30). They send their boys to school, take to no new pursuits, and are a falling class.

Sherherda.

Chapter III.

Population.

MANUFACTURERS.

(Shivajonis.

Shepherds, according to the 1881 census, included three classes with a strength of 88,374 or 11.33 per cent of the Hindu population. The details are:

Dhirmar Shepherds, 1881.

CLARS.	Males.	Females.	Total
Garlis Kurubars Kurubar Gurus	63,935	211 43,870 about a h	50G 87,7Cs undred
Total	41,203	41,071	87,374

Gavlis, or Cowherds, numbering about 500 are found all over the The original Gavlis or cowherds are said to have been district. called Golla Gavlis. According to tradition some four thousand years ago Nanda Gop and his wife Yashoda lived at Gokul or Vraj near the Ganges and Jamna in Upper India. In their house the parents of Krishna, the eighth incarnation of Vishnu hid him, when Kansa king of Mathura, Krishna's maternal uncle sought his life. Among the Golla Gaylis Krishna was reared and amused himself with 16,000 Gavli women, besides eight legal wives and concubines. His favourite and most beautiful concubine Radha, the wife of Anaya, was a Gavli. For this reason Golla Gavlis, of whom there are very few in Dhárwár, are looked on with great respect. They wear neither the sacred thread nor the ling but worship Vishnu in the form of Krishna. They live on millet, wheat, rice, vegetables, milk, and curds, and do not cat flesh or drink liquor Their god is Krishna, and their priests are Brahmans. cows and buffaloes, and trade in milk, which they make into curds, whey, and butter. They are strong fine-looking men, and the women are handsome. They speak both Kanarese and Marathi. They bury their dead. Widow marriage and divorce are allowed. They live both in towns and villages. The men dress in a headscarf, a pair of knee-breeches, a blue waistcloth, a shouldercloth, and sandals. The women dress in the bodice and the robe without passing the skirt back between the feet. They hold grand feasts on Krishna's birthday. Besides the original cowherds several other classes have become cow-keepers. They are: Nagar Gavlis, Pancham Gavlis, Lingávat Gavlis, Marátha Gavlis,

Garles.

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Population.
SHEPHERDS.
Gavlis.

Rajput or Ahir Gavlis, Kurubar or Kánareso Gavlis. Musalmán Gavlis. Of these the Nagar, Pancham, and Lingávat Gavlis are Lingayats by religion. They wear the ling, and their god is Siddoji or Siddheshvar. In dress and calling they do not differ from Golla Gavlis. Till within the last four years these three castes of cowherds used to call Brahmans to perform their marriage and other religious ceremonies. Since then Lingavat priests have persuaded them not to employ any priests but Lingavats. These three castes eat with each other; but they neithor marry with each other nor with any other class. Marátha Gavlis wear no ling; in religious matters they differ little from Marathas and like them eat flesh and drink liquor. In other respects their rules about food are the same as the Golla Gaylis' rules. They tend cows and buffaloes and hold a yearly feast on Krishna's birthday. They eat from Brahmans only, and marry with no caste but their own. In religious matters Rajput or Ahir Gavlis do not differ from Golla Gavlis. They tend cows and buffaloes and keep a yearly feast on Krishna's birthday exactly like Golla Gavlis. The women dress in a petticoat, a shouldercloth, and a bodice. They neither eat flesh nor drink liquor and neither eat nor marry with any other class. Kurubar or Shepherd Gavlis like other Kurubars or Shepherds cat flesh and drink liquor. They dress like Kurubars, and tend cows and buffaloes in forests and waste land, almost never living in towns or villages. They bring milk curds and butter to town and sell them there, or dispose of them to Lingayat and Marátha Gavlis wholesale, who afterwards sell them retail. Their chief holiday is Krishna's birthday. They eat food cooked by Brahmans, Lingayats, and Marathas, but marry with no caste but their own. Musalman Gavlis eat flesh and drink liquor and are Musalmans in religion, dress, and customs. They do not keep Krishna's birthday. They tend their cows and buffaloes in small villages and sell the milk, curds, and butter to Musalmans and other customers except Brahmans who do not buy from them. Musalman Gavlis eat food cooked by all classes except the early They marry among Musalmans only.

Kurubara.

Kurubars, or Shepherds, are returned as numbering about 87,800 and as found all over the district. They are called Kurubars because they tend sheep, and some of them knit blanket edges. They speak The ordinary names among men are Bharmappa, Maritammappa, Karibassappa, Sankappa, and Mudakappa; and among women Sanganbasava, Virava, Manava, and Savakka. Their family gods are Birdevaru whose chief shrine is at Hullikoppi in Bankapur, and Yellava whose chief shrine is in Savadatti in Belgaum. They also worship the village gods Dayamava and Durgava the goddess of cholera. They have four divisions, Handekurubaru, Jandekurubaru, Hathikankandayaru, and Unikankandayaru. The first neither cat nor marry with the other three, and the remaining three eat together but do not intermarry. Kurubars are dark, robust, and muscular. They live in tiled houses with one or two store rooms. Their house goods include four or five earthen vessels and brass plates. They are great eaters and bad cooks. Their daily food is Indian millet bread, pulse,

milk, and curds; and their holiday dishes are cakes of wheat-flour, coarse sugar, pulse, butter, and vegetables. They cat the fiesh of sheep. fowls, hares, and deer, but not of kine or swine. They are excessively fond of liquor, and also use tobacco and homp water or bhang. men dress in a loin and shouldercloth, short trousers, a coat, a turban. a blanket, and sandals; and the women in a robe and a bodice without passing the skirt of the robe back between the feet. The men wear car and finger rings, and the women car, nose, and too rings, glass bangles, and necklaces. They are dirty, but hardworking, eventempered, honest, and orderly. Many of them tend sheep, some weave blankets, and some work as labourers and a few as husbandmen. They work from morning till evening except two hours at noon for dinner and rest. They rest on the leading Hindu holidays. family of five spends about £1 (Rs. 10) a month on food. A house costs about £10 (Rs. 100) to build and about 2s. (Rc. 1) a month to reut. A birth costs about 4s. (Rs. 2), a son's marriago about £10 (Rs. 100) including £2 (Rs. 20) given to the girl's father, a girl's coming of ago about 10s. (Rs. 5), and a death about 16s. (Rs. 8). They are religious. They do not respect or employ Brahmans their religious ceremonies being conducted by hereditary priests of their own caste. They make pilgrimages to Hullikoppi in Bankapur and to Sibarkatti in Savanur. Their spiritual teacher is Ammayasidda who lives at Sibarkatti. He does not proselytise or try to get new followers. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child its navel cord is cut and the mother and child are bathed. The midwife buries the after-birth in a corner of the backyard. On the fifth day they worship the goddess Sathi and offer her food, and on the ninth day the child is named and cradled. A day before the wedding the bride and bridegroom are rubbed with turmeric. On the marriage day the bride and bridegroom are seated on carpets, verses are repeated, and red rice is thrown over their heads. Next day a dinner is given to castemen and the wedding is over. The dead are buried, and on the third day after death offerings of rice balls are made at the grave for the spirit of the dead. Child and widow marriage and

take to new pursuits and are a steady class.

Kurubar Gurus, or Shepherd Teachers, perhaps about a handred in all are found chiefly in Bankapur. They are the spiritual teachers or gurus of three classes of shepherds, Hattikankandavarus or cotton bracelet-wearers, Unikankandavarus or woollen bracelet-wearers, and Varasáliavarus a peculiar sect of shepherds. Kurubar Gurus do not act as priests to shepherds of the Haudekurubar and Jandekurubar divisious. They speak impure and indistinct Kanarese, and uso some strange words as jümbra for kelasa business, bashatikáran for vágnischaya a betrothal, tabandi for tambanu a plate, kodpána for koda a pitcher, haredage for munjháne in the morning, and chánji for sánji in the evening. The names in common use among men are Adiveppa, Bankayya, Raváppa,

polygamy are allowed, but polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by the members of the caste, and if any one disobeys their decisions he is put out of caste. They do not send their boys to school. They

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Population.
SHEPHERDS.
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Kurubar Gurus.

Chapter III.
Population.
Substitution.
Gavlis.

Rajput or Ahir Gavlis, Kurubar or Kánarese Gavlis, Musalmán Gavlis. Of these the Nagar, Pancham, and Lingáyat Gavlis are Lingayats by religion. They wear the ling, and their god is Siddoji or Siddheshvar. In dress and calling they do not differ from Golla Gavlis. Till within the last four years these three castes of cowherds used to call Brahmans to perform their marriage and other religious ceremonies. Since then Linguyat priests have persuaded them not to employ any priests but Lingayats. These three castes eat with each other; but they neither marry with each other nor with any other class. Marátha Gavlis wear no ling; in religious matters they differ little from Maráthás and like them eat flesh and drink liquor. In other respects their rules about food are the same as the Golla Gavlis' rules. They tend cows and buffaloes and hold a yearly feast on Krishna's birthday. They eat from Brahmans only, and marry with no caste but their own. In religious matters Rajput or Ahir Gaylis do not differ from Golla Gaylis. They tend cows and buffaloes and keep a yearly feast on Krishna's birthday exactly like Golla Gavlis. The women dress in a petticoat, a shouldercloth, and a bodice. They neither eat flesh drink liquor and neither eat nor marry with any other class. Kurubar or Shepherd Gavlis like other Kurubars or Shepherds eat flesh and drink liquor. They dress like Kurubars, and tend cows and buffaloes in forests and waste land, almost never living in towns or villages. They bring milk curds and butter to town and sell them there, or dispose of them to Lingáyat and Marátha Gavlis wholesale, who afterwards sell them retail. Their chief holiday is Krishna's birthday. They eat food cooked by Bráhmans, Lingáyats, and Maráthás, but marry with no caste but their own. Musalman Gavlis eat flesh and drink liquor and are Musalmáns in religion, dress, and customs. They do not keep Krishna's birthday. They tend their cows and buffaloes in small villages and sell the milk, curds, and butter to Musalmans and other customers except Bráhmans who do not buy from them. Musalman Gavlis eat food cooked by all classes except the early They marry among Musalmans only. tribes.

Kurubars.

Kurubars, or Shephords, are returned as numbering about 87,800 and as found all over the district. They are called Kurubars because they tend sheep, and some of them knit blanket edges. They speak Kánarese. The ordinary names among men are Bharmáppa, Maritammáppa, Karibassáppa, Sankáppa, and Mudakáppa; and among women Sanganbasava, Virava, Manava, and Sávakka. Their family gods are Birdevaru whose chief shrine is at Hullikoppi in Bankápur, and Yellava whose chief shrine is in Savadatti in Belgaum. They also worship the village gods Dayamava and Durgava the goddess of cholera. They have four divisions, Handekurubaru, Jandekurubaru, Hathikankandavaru, and Unikankandavaru. The first neither eat nor marry with the other three, and the remaining three eat together but do not intermarry. Kurubars are dark, robust, and muscular. They live in tiled houses with one or two store rooms. Their house goods include four or five earthen vessels and brass plates. They are great eaters and bad cooks. Their daily food is Indian millet bread, pulse,

milk, and curds; and their holiday dishes are cakes of wheat-flour, coarse sugar, pulse, butter, and vegetables. They eat the flesh of sheep, fowls, hares, and deer, but not of kine or swine. They are excessively fond of liquor, and also use tobacco and hemp water or bhang. The men dress in a loin and shouldercloth, short trousers, a coat, a turban, a blanket, and sandals; and the women in a robe and a bodice without passing the skirt of the robe back betweeen the feet. The men wear ear and finger rings, and the women ear, nose, and toe rings, glass bangles, and necklaces. They are dirty, but hardworking, eventempered, honest, and orderly. Many of them tend sheep, some weave blankets, and some work as labourers and a few as husbandmen. They work from morning till evening except two hours at noon for dinner and rest. They rest on the leading Hindu holidays. family of five spends about £1 (Rs. 10) a month on food. A house costs about £10 (Rs. 100) to build and about 2s. (Re. 1) a month to rent. A birth costs about 4s. (Rs. 2), a son's marriage about £10 (Rs. 100) including £2 (Rs. 20) given to the girl's father, a girl's coming of age about 10s. (Rs. 5), and a death about 16s. (Rs. 8). They are religious. They do not respect or employ Brahmans their religious ceremonies being conducted by hereditary priests of their own caste. They make pilgrimages to Hullikoppi in Bankapur and to Sibarkatti in Savanur. Their spiritual teacher is Ammayasidda who lives at Sibarkatti. He does not proselytise or try to get new followers. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child its navel cord is cut and the mother and child are bathed. The midwife buries the after-birth in a corner of the backyard. On the fifth day they worship the goddess Sathi and offer her food, and on the ninth day the child is named and cradled. A day before the wedding the bride and bridegroom are rubbed with turmeric. On the marriage day the bride and bridegroom are seated on carpets, verses are repeated, and red rice is thrown over their heads. Next day a dinner is given to castemen and the wedding is over. The dead are buried, and on the third day after death offerings of rice balls are made at the grave for the spirit of the dead. Child and widow marriage and polygamy are allowed, but polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by the members of the caste, and if any one disobeys their decisions he is put out of caste. They do not send their boys to school. They take to new pursuits and are a steady class.

Kurubar Gurus, or Shepherd Teachers, perhaps about a hundred in all are found chiefly in Bankápur. They are the spiritual teachers or gurus of three classes of shepherds, Hattikaukandavarus or cotton bracelet-wearers, Unikankandavarus or woollen bracelet-wearers, and Varasáliavarus a peculiar sect of shepherds. Kurubar Gurus do not act as priests to shepherds of the Handekurubar and Jandekurubar divisions. They speak impure and indistinct Kánarcse, and use some strange words as jámbra for kelasa business, bashatikáran for vágnischaya a betrothal, tabandi for tambana a plate, kodpána for koda a pitcher, haredage for munjháne in the morning, and chánji for sánji in the evening. The names in common uso among men are Adivoppa, Bankayya, Raváppa,

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Kurubar Gurus.

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Kurubar Gurus.

and Sidlingappa; and among women Basava, Irava, Kallava, They have no surnames or family stocks. and Mallava. The name of their chief god is Revansiddheshvar whose chief shrine is at Sarvar near Tálikot in Bijápur. They have no In dress and look they do not differ from other subdivisions. Linguyats except that like other shopherds their faces are oily. They are stout and dark. They live in dirty ill-cared for houses of the better class, one-storey high with wells of brick and tiled roofs. They are great eaters but bad cooks. Their chief calling is begging alms from their disciples the shepherds and dining at their houses. They go almost every day to dine at their followers' houses and whenever their teachers are asked to dine the shepherds do not cook flesh as the teachers neither eat flesh nor drink liquor. The teachers are ignorant and stupid and know little of the religion they profess to teach. They are idle, dirty, and untidy, but even-tempered and orderly. The shepherds show them less respect than they used to show. Most of them are in debt, and as they have no credit they are unable to borrow. They rank below all Lingáyats except Lingáyat barbers and washermen. A family of five spends £1 10s. (Rs. 15) a year on clothes, and about 16s. (Rs. 8) a month on food. A house costs about £10 (Rs. 100) to build and a shilling (8 as.) a month to rent. Their house goods are worth about £1 (Rs. 10). A birth costs about 4s. (Rs. 2), a marriage about £5 (Rs. 50), a girl's coming of age about 6s. (Rs. 3), a pregnancy about £4 (Rs. 2), and a death about 10s. (Rs. 5). They are religious. Their family gods are Revansiddheshvar and Basaveshvar. They do not worship the ordinary Brahmanic gods, and do not respect Brahmans or call them to their coremonics. They themselves act as priests on coremonial occasions. They keep the leading Hindu holidays Holihunvi in March-April, Ugádi in April-May, Nágpanchami in August-September, Ganeshchaturthi in September-October, and Dasara in October-November. Their spiritual head is the chief Lingávat priest who lives at Chitaldurg in north-west Maisur. Their customs and religious rites do not differ from those of other Lingáyats, except that at their death if a Lingáyat priest is present and sets his foot on the head of the dead no impurity is believed to have been caused. When a Lingayat priest does not place his foot on the deceased's head the deceased's family is unclean for eight days. When a Kurubar-Guru goes to the house of a follower he and his attendants are fed sumptuously and he is given \$d. to 6d. (1-4 as.). When a shepherd wishes to gain great morit he washes his teacher's feet. The water in which the teacher's feet is washed is called dhulpádodak or dust-washing. The disciple sips a few drops of the water and sprinkles the rest over his house. worships the feet with sandal wood pasto, rice, flowers and bel Ægle marmelos leaves, offers plantains, cocoanuts, and sugar, and falls prostrate before them. Next he touches the teacher's toes with his fingers and applies the fingers to his eyes. The teacher tells him that his sins are forgiven and that after death he will go to heaven. The Kurubar Gurus are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste, and any one who disobeys their decisions is either fined or put out of casto. A few of them send their boys and girls to school. They take to new pursuits and are a steady class.

Servants, according to the 1881 census, included seven classes with a strength of 77,624 or 9.95 per cent of the Hindu population. The details are:

Dhárwar Servants, 1881.

17/10/1 (KU) DEF(U/100) 1001.								
Class.	Males.	Females.	Total					
Ambigs, Fishermen Bedars, Hunters Bhols, Bearers Chelvadis, Messengers Mathpatis, Beadles Nadigars, Barbers Parits, Washermen	2555 26,344 560 1535 21 3524 3168	2718 27,910 618 1590 15 3356 3401	5273 54,254 1187 3125 36 6890 6509					
Total	28,016	39,603	77,621					

Ambigs, or River Fishermen, are returned as numbering about 5273 and as found in Dhárwár, Bankápur, Karajgi, Kalghatgi, Navalgund, and Ron. They take their name from the Sanskrit ambu water. They speak Kánarese. The names in common use among men are Honnáppa, Hulláppa, Mallápa, and Nágáppa; and among women Basava, Honnava, Mallava, and Ningava. Their family deities are Basappa, Udchava, and Yellava. They have no subdivisions. They are dark and sturdy and live in dirty houses with flat roofs. They are great eaters and bad cooks. Their daily food is Indian millet bread, pulso, and vegetables, and their special holiday dishes are sweet cakes, clarified butter, rice, and pulse. They use flesh and liquor. Every year they sacrifice a sheep to their goddess Durgava and kill a sheep on their ancestors' death days and eat its flesh. The men dress in a loin and shouldercloth, a jacket, a headscarf, and sandals; and the women in a robe and a bodice, without passing the skirt of the robe back between the feet. The men wear brass car and finger rings, and the women wear brass ear, nose, and too rings. They are sober, hardworking, even-tempered, and orderly, but unclean and untidy. Their main calling is fishcatching and ferrying. Some weave and others hire themselves as house servants. A family of five spends about 16s. (Rs.8) a month on food. A house costs about £10 (Rs. 100) to build, and their house goods are worth about £5 (Rs. 50). A birth costs about 2s. (Rc. 1), a marriage about £10 (Rs. 100), a girl's coming of age about 10s. (Rs. 5), a pregnancy about 4s. (Rs. 2), and a death about £1 (Rs. 10). They are religious, respecting Linguyat priests and calling them to conduct their religious ceremonies. They keep all the leading Hindu holidays. They have no guru or spiritual They believe in witches, sorcerers, and soothsayers. From the sixth to the twelfth of Bhudrapada or August-September the women of a few Ambig families carry on their heads from house to house a basket with a clay male image called Jokamár whose private parts are three times as large as the rest of his body. In front of each house the women sing Jokamar's praises and in return get small presents. Rival bands often dispute and fight for the privilege of carrying Jokamar. When a child is born its navel cord is cut

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and the after-birth is buried in a clean place. On the fifth day the mother of the child worships the goddess Jivati and the place where the after-birth is buried. On the thirteenth day the child is named and cradled. On the wedding day the village astrologer comes and sets his ghatika or bottom-pierced cup in a pot of water. In a ghatika, that is in about twenty-four minutes, the cup fills and sinks. It is emptied and again floated in the pot and this is repeated till the lucky moment comes. When the lucky moment comes the astrologer tells the members of the bride's family to worship the cap. When they have worshipped the cup, he repeats sacred hymns and throws a few grains of red rice on the heads of the bride and bridegroom. Others do the same, a feast is given to castemen, and the wedding is over. The dead are buried. Child and widow marriage and polygamy are practised, and polyandry is unknown. They are bound together by a strong class feeling. social disputes are settled by their caste people and any one who disobeys their decision is put out of caste. They do not send their children to school, take to no new pursuits, and on the whole are a steady class.

DISTRICTS.

Bedars.

Bedars, or the Fearless, also called Byadarus and Berads apparently originally meaning Hunters, are returned as numbering about 54,254. and as found allover the district. They speak impure Kánarese. The names in common use among men are Báláppa, Fakiráppa, Karáppa, and Yellappa; and among women Fakirava, Bhimava, Hanmava, Ningaya, and Yellaya. They have no surnames. Their chief god is Hanamappa whose shrine is at Navalgund, and they also worship Yellava, Basappa, and Venkataramana. They have three divisions the members of which do not eat together or intermarry. They are like Deccan Ramoshis who claim to have originally been Bedars or Berads.1 They are dark, strong, stalwart, and ugly. They live in dirty ill-cared for flat-roofed houses with walls of mud and sun-burnt bricks. They keep buffaloes, goats, fowls, and dogs. They are great eaters but poor cooks. Their every-day food is Indian millet bread, onions, garlic, and vegetables. Their holiday dishes are rice, flesh, and wheat cakes. They eat the flesh of sheep, fowls, hares, deer, fish, and hogs, and sometimes even of cows and buffaloes. They yearly sacrifice sheep to the goddess Durgamma, to the spirits of ancestors, and to pirs or Muhammadan saints. They are excessively fond of intoxicating drinks. They also use tobacco, gánja or hemp flowers, and bháng or hemp water. The men dress in a headscarf, a shouldercloth, a jacket, short and tight breeches, and a pair of sandals. The women wear a robe and a bodice. A few men have their head shaved but most let the head hair grow. The women either tie their hair in a knot or braid it. They have one or two sets of new clothes for holiday use. The men wear car and finger rings, and the women bracelets, waistchains, bangles, and They are hardworking, dishonest, and hot-tempered. nocklaces. Their chief calling is service. They also fetch firewood, tie it into bundles, and sell it in the market, and also sell mangoes and other

¹ Poona Statistical Account, Bombay Gazotteer, XVIII. 409.

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Bedars.

fruits in their season. They sometimes hunt in the forest lands. Many of them, especially of the Gorvankolla Bedars, are notorious thieves and robbers, and many of the women are prostitutes. work as day-labourers from six to twelve in the morning and from two to six in the evening. Their busy months are March and April. They do not work on ordinary Hindu holidays or during the Moharram. A family of five spends about 12s. (Rs. 6) a month on food and about £1 4s. (Rs. 12) a year on clothes. It costs them about £5 (Rs. 50) to build a house and about 1s. (8 as.) to rent one. The value of their house goods is about £2 10s. (Rs. 25). A birth costs them about 8s. (Rs. 4), a son's marriage about £10 (Rs. 100) including £3 12s. (Rs. 36) paid to the girl's father, a girl's coming of age about 16s. (Rs. 8), and a death about 18s. (Rs. 9). They are religious. They respect Brahmans and call them to conduct their marriages. funeral ceremonies are performed by priests of their own class. worship the Brühmanic gods and keep the usual Brühmanic holidays. They make pilgrimages to the shrine of the goddess Yellamma in Savadatti in Belgaum, and to the tomb of Pir Ráje Bágsavár at Yamnur in Navalgund. They have a guru or spiritual teacher who lives at Kanakagiri near Gadag. Besides Bráhmanic gods they worship the village guardians Durgava and Dayamava, the latter represented as a lion-riding woman with ten arms each holding a weapon. They profess not to believe in witchcraft, sorcery, or soothsaying. They do not keep the regular Hindu sanskurs or sacraments. On the birth of a child they cut its navel cord. On the fifth the goddess Sathi is worshipped and caste people are feasted. On the twelfth they lay the child in a cradle and name it. At marriage the bride and bridegroom are rubbed with turmeric, bathed, and made to sit on a raised seat called jagali. The priest repeats verses and throws red rice on the pair. They burn their dead, and on the third day give a caste dinner. They are bound together by a strong casto feeling. Social disputes are settled by a majority of the castemen and if any one disobeys their decision he is put out of caste. Child and widow marriage and polygamy are allowed and polyandry is unknown. They send their boys and girls to school, take to new pursuits, and are a steady class.

Bhois, or Litter-Bearers, are returned as numbering about 1187 and as found all over the district. They are of four sects Besta Bhois, Gangi Bhois, Sadar Bhois, and Kárva Bhois. Besta Bhois wear the ling and eat from Gangi Bhois but not from Sadar Bhois. They do not marry with the other two classes. Gangi Bhois do not wear the ling. They eat from Besta Bhois, but not from Sadar Bhois and do not marry with either of the other two classes. Sadar Bhois do not wear the ling. They eat from Besta and Gangi Bhois, but do not marry with them. Till within the last fifty years Bhois were in great demand as litter-bearers. Since roads have been made, they have turned to fishing and labour and many have become constables. They eat mutton pork and fish, but not beef. They are stoutly made and black or brown in colour. The men wear a headscarf, a coat, and a waistcloth, and the women let the robe fall like a petticoat. Their chief gods are Bassáppa, Dayamava, and

Bhois.

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Hanumán. Their home speech is Kánarese. Kárva Bhois were formerly palanquin-bearers and are now fishers and labourers. They do not wear the ling. They eat from all classes except from Musalmáns, Holayas, and Madigars. They are dark, strong, and well-made, and eat flesh and drink liquor. Their dress does not differ from that of other Bhois. They worship Hanumán, Bassáppa, and Dayamava. Other Bhois do not marry with them.

Chelvádis.

Chelva'dis returned as numbering about 3125, are a class of Lingáyat Holayas who neither marry nor cat with other Holayas. They follow the practices of the Lingayats in all respects. They dress so neatly and so exactly like Lingayats that it is often difficult to distinguish them from Lingayats. They wear the ling. Their chief gods are Shiva and Basaveshvar. If they choose they may worship Hanuman and Dayamava, but they are in no way bound to worship them. They are able to read and write Kanarese. The names in common use among men are Baslingáppa, Gurlingáppa, and Virabhadrappa; and among women Buslingava, Gurlingava, and Virabhadrava. They do not use flesh or intoxicating drinks. A family of five spends on food about 16s. (Rs. 8) a month. It costs them about £30 (Rs. 300) to build a house. A birth costs them about 10s. (Rs. 5), a marriage about £20 (Rs. 200), and a death about 10s. (Rs. 5). They do not provide husbands for all their Some are given in marriage, while others live by daughters. prostitution. When it is determined that a girl is not to marry and is to become a Basavi or female devotee of the Lingáyat gods, a caste meeting is called, and, in presence of the meeting, the Lingayat priests tell her that she has been made a Basavi and that she is to live as a courtezan. The chief duty of the Chelvadi is to attend all Lingáyat meetings and temples, and stand with their official brass bell and spoon until the business of the meeting is over, and generally to serve the Lingayat community. Divorce and widow marriage are allowed. They send their children to school, take to no new pursuits, and on the whole are a steady class.

Mathpatis.

Mathpatis, or Lingáyat Beadles, are returned as numbering about thirty-six and as found in Gadag, Hangal, Kod, and Ranebennur. They speak impure Kanarese. The names in common use among men are Basappa, Kallappa, and Ningappa; and among women Basava, Ningava, and Yellava. They have no divisions. They are strong and muscular. They live in dirty ill-cared for flat-roofed houses with walls of mud and stone, and keep cows and she-buffaloes. Their daily food is Indian millet bread, pulse, and vegetables, and their holiday dishes are sweet cakes, curds, and clarified butter. They do not eat flesh or drink liquor. The men dress in a loin and shouldercloth, a jacket, a headscarf, and sandals; and the women in a robe and bodice without passing the skirt of the robe back between the feet. The men wear ear and finger rings, and the women ear, finger, nose, and toe rings, waistbands, and anklets. They are clean, neat, hardworking, even-tempered, and orderly. Their chief duty is to act as servants to the Lingayat community. They keep all the leading Hindu holidays. They spend very little on food as they are constantly asked to dine by Lingayats. A house costs about £10 (Rs. 100) to build and about 2s. (Re. 1) a month to rent, and their house goods are worth about £5 (Rs. 50). A birth costs about 4s. (Rs. 2), a marriage about £15 (Rs. 150), a girl's coming of age about £1 10s. (Rs. 15), a pregnancy about £1 (Rs. 10), and a death about £2 (Rs. 20). They are religious respecting Lingayat priests and calling them to conduct their religious ceremonies. They make pilgrimages to Ulvi in North Kánara and to Hampi in Bellári. Their spiritual guide called Totadasvámi lives at Gadag in Dhárwár. They profess not to believe in sorcery, witchcraft, or soothsaying. Their religious rites and customs are the same as those of other Lingáyats. At Lingáyat marriages the Mathpati calls the guests. arranges lights, vessels, betelnuts and leaves, cocoanuts, lemons, dates, and other articles, and does all that the Lingayat priest orders. After a death the Mathpati washes the face of the dead. marks it with white ashes, sets it in a sitting posture in the house, and afterwards puts it in a car-shaped bier, walks with it to the burial ground, washes the face at the burial ground, puts it into a cloth bag, and sets it in the grave, and when the pit is filled washes the priest's feet who stands on the grave, and breaks a cocoanut in front of the priest's feet. In return the Mathpati is paid 1s. to 2s. (Re. 1-1). Child and widow marriage and polygamy are allowed, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste and any one who disobeys the decision is put out of caste. They send their boys to school, take to no new pursuits, and are a steady class.

Na'diga'rs, or Barbers, are returned as numbering about 6880, and as found all over the district. They include Maráthás, Lingáyats, Musalmáns, and a few Pardeshis from Upper India. In matters of food and religion each division follows the practices of its own people.

Lingáyat Nádigárs, who are the largest division in the class, are found in all parts of the district. They speak a badly pronounced The names in common use among men are Basáppa, Malláppa, and Mugáppa; and among women Basava, Ningava, and Yellava. Their family gods are Basáppa and Hanmáppa, and their family goddess is Bánashankari whose chief shrine is near Badámi in Bijápur. They have no subdivisions. are tall and dark. They live in dirty ill-cared for flat-roofed houses with walls of mud and sun-burnt brick. Their daily food is Indian millet bread, pulse, and vegetables, and their special holiday dishes are sweet cakes, rice, milk, and clarified butter. They do not eat flesh or drink liquor. The men wear a loin and shouldercloth, a jacket, and a headscarf; and the women a robe and bodice, but without passing the skirt of the robe back between the feet. They are even-tempered, hospitable, and orderly but lazy and unclean. Their main calling is shaving, but they occasionally act as village surgeons dressing wounds and setting dislocated bones. Their calling is prosperous. The people of Dharwar used to shave only once a fortuight and not oven then unless the day was lucky. Now they are shaved once a week and without much

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regard to unlucky days. This has greatly increased the barber's incomes. A family of five spends about 12s. (Rs. 6) a month on food and about £2 (Rs. 20) a year on dress. A house costs them about £15 (Rs. 150) to build. A birth costs about 10s. (Rs. 5), a marriage about £15 (Rs. 150), a girl's coming of age about £1 (Rs. 10), a pregnancy about 6s. (Rs. 3), and a death about £1 (Rs. 10). They are religious, respecting Lingayat priests and calling them to conduct their religious ceremonies. They worship the Brahmanic god Hanumán, and keep the leading Hindu holidays. They make pilgrimages to Bánshankari near Badámi in South Bijápur. Their spiritual teacher called Pattadasvámi lives at Navalgund. occasionally worship the village goddesses Dayamava and Durgava. They believe in sorcery, witchcraft, and soothsaying. On the birth of a child its navel-cord is cut. on the fifth day the goddess Sathi is worshipped and friends and relations are feasted, and on the twelfth day the child is named and cradled. On the first day of marriage the bride and bridegroom are rubbed with turmeric and bathed, on the second day the wedding ceremony is performed, on the third day caste people are feasted, and on the fourth day the bride and bridegroom are taken in procession on horse-back through the principal streets of the town. The dead are buried with the same funeral rites as other Lingayats. Child and widow marriage and polygamy are practised, and polyandry is unknown. They are bound together by a strong caste feeling. Social disputes are settled by a majority of the castemen. They send their boys to school, take to no new pursuits, and are a steady class.

Parits.

Parits or Agasarus that is Washermen, numbering about 6869 are either Lingáyats, Maráthas, or Musalmáns and are found all over the district. Each of these divisions follows the religion and customs of their own class.

Lingáyat Parits or Washermen are found all over the district Their home speech is Kanarese. The names in common use among men are Basappa, Ningappa, and Virappa; and among women Basava, Fakirava, and Ningava. They have no surnames and are generally known from the names of the towns or villages in which they live. Their family god is Virabhadra whose chief shrine is near Ramdurg in Belgaum. They have no subdivisions. are short, strong, muscular, and brown. They live in flat-roofed houses with walls of brick and mud. Their daily food is Indian millet bread and vegetables, and on holidays they eat rice, pulse, clarified butter, and sweet cakes. They eat no flesh and drink no liquor. The men dress in a loin and a shouldercloth, a coat, and a headscarf, and the women in a robe and bodice without passing the skirt of the robe back between the feet. They generally dress in clothes given to them to wash. Both men and women wear the ling and mark their brows with white ashes. The women tattoo their foreheads and hands. The men wear ear and finger rings and waistchains, and the women wear ear, finger, and nose rings, armlets, and necklaces. They are hardworking, even-tempered, hospitable They work from morning till evening except and orderly. two or three hours for meals and rest at noon. Their women and children help in the work. A family of five spends about £1 (Rs. 10) a month on food. A house costs about £10 (Rs. 100) to build, and their house goods are worth about £5 (Rs. 50). A birth costs 10s. (Rs. 5), a marriage £10 (Rs. 100), a girl's coming of age 10s. (Rs. 5), and a death about £1 (Rs. 10). respect both Bráhmans and Lingáyat priests. They call Bráhmans to conduct their marriages and Lingayat priests to conduct their funeral rites. They keep all Hindu holidays and make pilgrimages to the shrines of Basavana in Kanara and of Virabhadra near Rámdurg in Belgaum. Their spiritual teachers are Lingáyat They believe in sorcery, witchcraft, and soothsaying. Their birth, marriage, and death ceremonies do not differ from those of other Lingávats. Child and widow marriage, divorce, and polygamy are allowed but not polyandry. In Dhárwár among high class Hindus when a woman comes of age the clothes which she wore at the time go to the washerman.1 Parits are bound together by a strong caste feeling. Their social disputes are settled by Lingáyat priests. Some of them send their children to school. They take to no new pursuits, and on the whole are a steady class.

Courtezans irrespective of caste may be arranged under four groups, Pátradavarus or dancing girls, Basavis or Lingáyat devotees, Sulorus or trained courtezans, and Kasbins or strumpets.

Pa'tradavarus, or Dancing Girls, numbering probably about 300, are found in towns and large villages. They claim to represent the heavenly dancing girls Rambha and Urvasi. Their home speech is Kánarese. The names in common use are Chandraseni, Gavraseni, Hulgaseni, Nágaseni, and Pattaseni; and the names of their brothers and sons are Basána, Fakiráppa, Kásána, and Tippána. They have no surnames. Their family god is Mailar whose chief shrine is at Gudaguddapur in Ranebennur, and their family goddesses are Guttema and Hulgemma. The Pátradavarus are fair, handsome, and lively. Most of them live in better class neat well-kept houses one-storey high with walls of brick and tiled roofs. They have a good store of cooking and drinking vessels and keep cows and buffaloes. They are hearty eaters and bad cooks. Their daily food includes rice, pulse, vegetables, clarified butter, milk, and curds, and their holiday dishes are sweet cakes of coarse sugar, wheat-flour, and pulse. They eat the flesh of sheep and fowls and occasionally sacrifice a sheep to their goddesses Guttemma and Hulgemma. They occasionally drink spirits, chew tobacco, and use snuft. Their robe and bodice are like those worn by Brahman women except that the plain end of the robe is tucked into the waist and fastened with a knot on the right side, the upper middle part is folded forwards and backwards about three inches broad, brought to the navel, and turned upside down for about an inch to fasten the

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¹ Among high class Dharwar Hindus when a girl comes of age the family washerman is sent for. He folds a sheet and spreads it in the ornamental canopy or makker prepared for the girl to sit in. Coloured lines are drawn on the cloth and the girl is seated on it for a couple of hours during which friends and relations present her with flowers, fruit, turmeric, redpowder, and bodices.

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cloth to the waist, and the finer end of the cloth is carried behind the back, brought under the right arm, carried over the left shoulder, and allowed to fall loose on the right shoulder. Except whon dancing or singing they do not pass the skirt of the robe back between the feet. They generally braid their hair and sometimes They rub turmeric powder and water on their tio it in a knot. face, hands, and legs, and mark their brows with redpowder. They are neat and clean in their dress and have a special liking for bright colours. Their brothers and sons dress like ordinary middle-class Kánarese. On holídays and when they go to public gatherings to dance and sing the Patradavarus wear a more costly dress. Their clothes are of local hand woven cloth bought in the local shops. Their ornaments are the kyadgi, chandrakor, nagara, chadri, and rákhdi for the head; the bugdi, balya, and vali for the ears; the nath or nosering for the left nostril, and the besri or pin for the right nostril, the hulak a small ring of precious stones and pearls for the middle of the nose; gold necklaces called tikis, kathanis, and sargis for the neck; gold vankis and bajubands for the arms; gold pátlis, kadgas, hárdis, and kankanas for the wrists; and silver chains called sapalis and paijanas for the legs. They are canning, clever, neat, clean, even-tempered, hospitable, and orderly. Their main calling is dancing and singing. Their craft is declining from the difficulty which the Indian Penal Code throws in the way of their getting girls to train in their art. Their brothers and sons beat drums and play the sárangi or fiddle behind the girls when they are dancing and singing. They spend each about £1 (Rs. 10) a month on food and about £10 (Rs. 100) a year on clothes. A house costs about £100 (Rs. 1000) to build. A birth costs about £2 (Rs. 20), a brother's or son's marriage about £10 (Rs. 100), a girl's coming of age about £1 10s. (Rs. 15), a pregnancy about £2 (Rs. 20), and a death about £1 10s. (Rs. 15). They are religious and daily worship the images of their family deities Mailar, Guttemma, and Hulgemma. The Hindu Patradavarus or dancing girls respect Brahmans and call them to conduct their religious ceremonies, and the Musalman dancing girls call the Kazi or Mulla to conduct their religious rites. The Hindu dancing girls have a guru or spiritual teacher named Ayyappa, a Kshatriya by caste, who comes twice a year and gives the dancing girls holy water, ashes, and turmeric, and in return receives money and provisions. They believe in sorcery, witchcraft, and soothsaying. As soon as a child is born its nose is touched with a gold ring before it sneezes, its navel cord is cut, and a few drops of honey are poured into its mouth. To guard the child against sickness a needle is heated on a lamp and laid on the crown of the child's head, and on its shoulders, its chest, the palms of its hands, and the soles On the third day a small hole is dug outside of the house, and turmeric and redpowder, and nim Melia azadirachta leaves are thrown into the hole. On the fifth day the goddess Sathvi is worshipped, and on the the thirteenth the child is laid in the cradle and named. On the twenty-ninth some kinswoman goes to a well and brings a pitcherfull of water on her head to the outer gate of the house. The mother comes out and with her own hands

lowers the pitcher from the woman's head. The pitcher is worshipped and a festive dinner is given. At the close of the third month new glass bangles are put on the mother's wrists, the infant is carried to a temple and presented to the god, a few flowers and fruit are offered to the god, and the child is brought home, and on the same day the child's earlobes are bored. During a girl's seventh year a good day is chosen and all the dancing girls of the town are asked to the house. The girl is rubbed with oil and turmeric and bathed in hot water. A twosided dram called madli, the string of metal bells which dancing girls tie to their ankles when they dance, and other musical instruments used in dancing and singing are laid on a carpet and worshipped by the girl. The girl is made to wear a pair of worshipped by the girl. trousers and a bodice, a scarf is thrown over her body, and she is made to dance and sing for the first time in her life. Kunku or redpowder, turmeric, betelnut and leaves, sugar, and scraped cocon-kernel are handed to the guests. From that day the girl is taught to read and write and to sing and dance. When she is about twelve years old a ceremony called halpudi is performed. A good day is chosen, all the dancing girls of the neighbourhood are called, and the maili or the double drum and other musical instruments used in dancing and singing are laid on a carpet. The girl is made to sit on the left of the dram and all the forms of marriage are gone through as if the dram were the bridegroom and the girl the bride, presents are made to Brahmans, the dancing girls are feasted, and the marriage is over. When a girl comes of age she is made to sit by herself for three days. On the fourth day she is anointed, feasted and decked with ornaments, and two lighted lamps set in a plate with red water are waved round her face. Before a girl comes of age arrangements have generally been made with some one to become the girl's first lover and protector. The protector comes to the girl's house and after a feast they retire The girl must live with her first lover for at least a month. He keeps a special position among her admirers, and, as a husband, ranks next to the drum. A dutiful dancing girl, till they are parted by death, continues to treat her first lover with special respect. Among dancing girls daughters inherit the mother's property. The brothers of dancing girls marry private women, and their daughters either become dancing girls or are given in marriage into other families. If any one strikes a dancing girl with a shoe, though she may have done nothing wrong, the girl loses ciste and has to pay a fine and undergo penance before she is let back. They are bound together by a strong caste feeling. Social disputes are settled by members of their caste and by their spiritual teacher. They send their boys and girls to school, but on the whole are a falling class.

Basavis, or Lingáyat Women Devotces, probably numbering about 2000 are found over the whole district. They speak Kánarcse Their names are Basava, Dayamava, Irava, Kallava and Rachava; and the names of their brothers and sons are Guráppa, Kalláppa, Mulláppa, Sangáppa and Shivarudráppa. They have no surnames except place names. Their gods are Basavana and Mallikárjuna

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Linguyat Busavis.

whose shrines are found in almost all large Dhárwár villages. They live in clean and neat flat-roofed houses with walls of mud. They keep cows and buffaloes when they can afford it. Their daily food is rice, Indian millet or wheat bread, pulse, vegetables, milk, curds, and buttor. They neither cat flesh nor drink liquor. They wear a robe and a bodice like Lingáyat women. have no stock of clothes for special occasions. They wear car, nose, fingor, and toe rings, necklaces, armlets, and a silver ling box hanging from the neck. They rub themselves with white cowdung ashes or vibhuti. They are clean, neat, even-tempered, and hospitable. Most of them openly act as courtezans. Their main calling is to attend caste meetings and marriage and other ceremonies, to help women in performing religious rites, and to wave lighted lamps round the bride and bridegroom. A Basavi spends about 10s. (Rs. 5) a month on food and about £1 (Rs.10) a year on clothes. Basavis have no special coremonies. They send their boys and girls to school, and take to no new pursuits. On the whole they are a falling class.

Sulcrus.

Sulerus, numbering perhaps about 1000, are women trained to be courtezans. They are neither allowed to pass the robe between the feet nor to wear ankle bells. They do not dance or sing and never appear in public assemblies, nor, except by stealth, in the houses of respectable persons. They speak Kánarcse. The names in common use among them are Bharmi, Heli, Nági, and Sávitri. They have no special family gods and have no divisions. They vary much in appearance, some being dark, some fair, and some wheat-coloured. They live in small houses one-storey high with walls of sun-burnt brick and mud. Their daily food is rice, Indian millet, pulse, and vegetables. Occasionally they sacrifice sheep and fowls to the goddesses Dayamava, Durgava, and Yollava, and cat their flesh. They are excessively fond of intoxicating drinks. They are artful cunning and quarrelsome. Their expenses vary according to their means. A Sulern spends 8s. to £1 (Rs. 4-10) a month on food and 6s. to £1 10s. (Rs. 3-15) a year on dress. When a girl is about ten years old she is married to the god Parashurám. Some grains of rice are spread on a carpet before the image of the goddess Yellamma the mother of Parashuram and the girl is made to sit on the rice. Five elderly Sulerus come and tie a necklace of gold and glass beads round her neck, put a silver toering on her great toes, dress her in a new robe and bodice, and marry her to an image of Parashurám. Caste people are feasted and the girl becomes a member of the courtezan community. When she comes of age her protector who must be a Brahman, Lingáyat, Jain, or Rajput ties a necklace of gold and glass beads round her neck and a feast is given. They do not send their children to school, and show no signs of improving.

Kasbins.

Kasbins are low class courtezans without any training or accomplishments. They are generally recruited from women who have been divorced or deserted by their husbands, and all married or unmarried women and widows who have left their relations and friends of their own accord and have chosen to live as prostitutes.

They do not go through any form of marriage or other ceremony like the dancing girls. They generally belong to the lower classes. A Brahman woman never becomes a Kasbin though she may have been put away by her husband because of adultery. Kasbins dress and adorn themselves well enough to draw public attention. They do not eat together unless they happen to belong to the same casts. In other matters the social position of Kasbins of all castes is the same. They are not allowed to wear ankle bells or to sing dance or sit in a public assembly. The three better classes of trained courtezans, the Patradavarus, Basavis, and Sulerus, have no dealings with Kasbins.

Wanderers, according to the 1881 census, included five classes with a strength of about 22,700 or 2.91 per cent of the Hindu population. The details are:

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WANDERERS.

Dharwar Wanderers, 1881.

Division.	Mairs.	Fomales	Total.	Division.	Males.	Females	Total.
Advichanchars' Dombars	114	162	dred. 276	Shikaigurs Vaddars	62 8460	66 8374	119 16,860
Romars "	2667	2683	5350	Total	11,323	11,275	22,701

* This caste is not shown in the census returns.

Advichanchars, or Forest Wanderers, number about a hundred. They generally live in forests, and occasionally come to towns or villages either to beg or to sell reed baskets. They take their name from the Sanskrit words atavi a forest and sanchar a wanderer. They are tall, active, lean, and dirty. They dress like other local low class Hindus except that their clothing is often extremely scanty. They live by hunting and begging, and sometimes by making baskets called galgi or gummi three feet wide and four or five feet high which villagers buy, cowdung, and use for storing grain. A division of these people called Josigerus also make black-stone vessels of various sizes, which are used in keeping pickles and sometimes in cooking. They use animal food. They do not marry with any other caste and do not cat from the impure They have no special object of worship. They bow to Hannman, Bassappa, and Dayamava when they come into a village. Otherwise they live in the forests, in the open air during the hot season, and under small mat coverings during the rains. They carry their babies in small baskets, or in pieces of cloth about two feet square slung from a pole about three feet long.

Dombars are returned as numbering about 276 and as found all over the district. They are tall, powerful, intelligent, and rather handsome. Both men and women climb single bamboo poles twenty or thirty feet high, walk on long ropes with great weights fastened to their bodies, jump, and perform other feats. They dress like ordinary Hindus and eat animal food. Divorce and widow marriage are allowed and practised. They have no special object of worship. They are part Hindus and part Musalmáns, but are not careful to keep religious rules. They marry with no other caste and do not eat from Holayas or Mádigárs.

Advichanchars.

Dombars.

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WANTERERS.
Account.

Korava'rs, numbering about 5850, are found scattered all over the district in groups of eight or ten families who live on the outskirts of some village for a year or so and then move. Their home tougue is a mixture of Telugu, Tamil and Kanarese, and they speak Kanarese with the people of the district. The names in common use among menare Adiria, Jira. Hanma, Ráma, and Sanka; and among women Balli, Nagi, Savitti, Sanki, and Timmil They have no surnames. Their family goddess is Sankalamma and each family keeps an image of the goddess in their house. They have no divisions. The men wear a largeti, a piece of cloth three inches broad and two feet long, one end of which is fixed to a waist string in front and the other passed between the feet and tied to the waist string behind. They wear a second piece of cloth round the waist and a third round the head. The women wear a robe and bodice like lower class Hindu women. They are apparently a very early tribe, smaller and slighter than the rest of the people of the district. They are a wandering tribe and have no fixed homes. They live in small huts made of reed mats, about four feet high and three broad, which can be moved at pleasure, carried from place to place and again set up. As a rule their hats do not last for more than a year. They keep sheep, cows. and buffaloes. Their daily food is boiled rice or rigi-fiour balls boiled in water, and tamarind boiled with pulse and condiments. On holidays they eat the fiesh of sheep, hares, swine, fowls, and other came animals and birds, and use melasses with their food. They drink liquer. The men wear ear, finger, and wrist rings, and the women in addition wear brass armlets and a nose-pin called reacti. Ther are dirty, untidy and given to stealing, but hardworking and eventempered. Their chief employment is plaining bamboo baskets and mats and hunting. In hunting they steal into the forests hiding as far as possible behind their buffilees. When in a suitable place they set up nots and begin to call like birds. The birds answer and gather and the men start up and frighten them into the nets. The women do not help them in snaring. They do not find full employment as basket-makers. Some are in debt and others do not own more than £1 to £110s (Rs.10-15). They rank below Shepherds and above Holayns and Madigars. They keep four bolidays in the year, Ugidi in April-May, Naopunchami in August -September, Dasans in October-November, and Diralli in November. A family of five spends about 16s. (Rs. S) a month on food and about 2c (Re. 1) a year on their reed-hut. A birth costs them about 4s. (Rs. 2), a boy's marriage about £6 (Rs. 60) including 23 4s. (Rs. 32) paid to the bride as down, and a girl's coming of age about 4s. (Rs. 2). They spend nothing either on a pregnancy or on a death. They are religious. Every Tuesday they worship an earthen image of their family goddess Sanklamma and offer her a everanut and plantains, burn incense, and wave a lighted lamp round her face. They do not respect Brahman or Linguigat priests and have their religious ceremonies

¹ Many of the men are called Sunks and the women Sunki probably after their family podders Sunkalarma.

conducted by men of their own tribe. They believe in sorcery, witchcraft, and soothsaying. When a person sickens or a misfortune befalls him they go to Adibhat, a Smárt Bráhman priest in the village of Hangal, and ask him the cause of the sickness or misfortune. The Brahman priest tells them to pray to their goddess and to set apart \(\frac{1}{4} anna \) or \(\frac{1}{6} d. \) in her honour. They give \(\frac{1}{4} a. \) to the priest for his trouble, and after coming home pray to their family goddess, set 4 a. apart in her honour, and make a vow that if the sickness or misfortune is removed they will adorn the goddess with silver eyes and moustaches. Sometimes the evil spirit which brought the sickness or ill-luck comes and tells them in a dream that it wants food. The Koravars boil a little rice, mix it with red water, make it into three balls, and set them in an earthen plate. They make a small hole on the top of each ball, put some oil and a wick in each, light the wicks, place turmeric, fried rice, gram, lemons, and plantains in the plate, wave the whole three times round the sick and carrying it into the forest throw it away. The evil spirit eats the food and the sick person forthwith gets well. As soon as a child is born the navel cord is cut, and it is anointed with castor-oil and bathed in warm water. The mother is not bathed, and for five days is fed on the flesh of a fowl. On the eleventh day the mother is bathed, the child is named and put into a cloth cradle by the midwife, and a feast is given to members of the caste. In the third month both boys and girls have their hair cut by a barber who is given a small present. They hold it improper to allow the first hair especially of a girl to remain on her head. No lucky day is required for a marriage. When a marriage is fixed a dinner is given in honour of the goddess Sanklamma and no flesh is cooked on that day. On the marriage day the bride and bridegroom are rubbed with turmeric, bathed, and made to sit on rice sprinkled over a blanket, spread on a raised seat. The bride is seated to the left of the bridegroom and the little finger of the bridegroom's left hand is linked in the little finger of the bride's right hand. Five married women come and sing marriage songs, tie the kankan or yellow threads round the wrists of the bride and bridegroom, throw grains of red rice over their heads, and wave lighted lamps round their faces. Food is made ready and the bride and bridegroom with their little fingers still linked are taken to an inner room, their linked hands dipped in a dish of water and unlinked under water. When this is over the marriage is complete, and the pair are held to be bound together till parted by death. The bride and bridegroom take a meal together, and, on the fourth day, a caste feast, the chief dish in which is animal food, is given. When a girl comes of age a little liquor is brought and given to friends and relations to drink, and the husband and wife begin to live together. The dead are buried. Child and widow marriage and polygamy are allowed, but divorce is forbidden even if a wife commits adultery. They are bound together by a strong caste feeling. Their social disputes are settled by the caste people and any one who disobeys their decisions is either put out of caste or fined. They do not send their children to school, do not take to new pursuits, and on the whole are a falling class.

Chapter III.
Population.
Wanderers.
Koravárs.

Chapter III.
Population.
Wanderers.
Shikalgars.

Shikalga'rs, or Armourers, a class of wandering beggars, are returned as numbering about 118. They travel about the district and halt in the outskirts of villages for three or four days at a time. Though neither Hindus nor Musalmans they bear both Hindu and Muhammadan names. The names in common use among men are Jangli, Krishna, Daval, and Fakirsab; and among women Bhima, Gavriamma, Rájamma, and Ránamma. They speak a corrupt Hindustani. They have no divisions. They are tall and dark-brown. They live in huts or tents made of reed mats, about eight feet long, four feet broad, and four feet high. Their daily food is Indian millet bread, rági gruel Eleusine corocana, and wild vegetables. They are so poor that they are often scrimped for food. They eat flesh, except the flesh of kine or swine, and drink liquor. The men wear a piece of ragged cloth two or three inches broad and two feet long. They fasten one end of this cloth to a waist-string, and, passing it back between the feet, tie the other end to the same string behind. They use another piece of old and torn cloth about four or five feet broad and six or seven feet long to cover their bodies. The women wear old robes, but do not pass the skirt between their feet, and allow the upper end to fall on the left shoulder instead of on the right. The men wear brass ear and finger rings, and necklaces of black beads, They blacken their teeth and sometimes bore holes in them for ornament. The women wear brass ear and finger rings, and red or white coral or black bead necklaces. They do not braid their hair or tie it into a knot behind but let it fall loose on their shoulders. They are even-tempered, lazy, and dirty. Their chief calling is begging and occasionally cleaning swords. The men are idle and neither work nor beg. The women go into the villages, gather alms and support their husbands and children. They rank below all classes except Holayas, Madigars, and Dhors. Their feeding and clothing charges are nothing as they live on alms and old clothes. A marriage costs 4s. to 8s. (Rs. 2-4). They spend nothing either at births, coming of age, or deaths. They have no family gods. They occasionally worship Durgava the goddess of cholera, and the tomb of the famous Musalman saint Raje Bagsoar near Yamnur in Navalgund. They have no spiritual teacher. They keep no holidays and never go They believe in sorcery, witchcraft, and on pilgrimage. scothsaying. As soon as a child is born its navel cord is cut, and is buried in some secret place. For two or three days the mother is fed on rice and on the fourth or fifth day she is ready to travel as usual. On the tenth the mother carries five betel leaves, and one betelnut to a river or a well, lays them before the water, burns incense, and brings home a pitcher full of water. No other ceremony is observed till marriage. At their marriages the casto people meet and an elderly man ties a betel leaf to the right wrists of the bride and bridegroom. They are fed and the wedding is over. When the marriage is over a brass nose-ring is pierced into the left nostril of the bride, and, on the third day, it is drawn out and the hole allowed to heal. The dead are buried face down, and on the third day some cooked rice is placed on the grave as an offering to the spirit of the dead. They have the rule that, when a man dies, his brother should take the dead man's widow in addition

to his own wife. Birth, monthly sickness, and death cause no impurity. Child and widow marriage and polygamy are practised, but not polyandry. They are bound together by a strong casto feeling. Their social disputes are settled by the oldest members of the community. If any one disobeys their decisions he is put out of caste, but is allowed back on paying a fine of 3d. (2 as.). They do not send their children to school, take to no new pursuits, and show no signs of rights.

show no signs of rising. Vaddars are returned as numbering about 16,860 and as found all over the district. They generally live in the outskirts of villages and in forest lands. They speak Telugu and impure Kanarese. Their pronunciation is indistinct and they speak so hastily that a conversation counds like a quarrel. The names in common use among men are Gidda, Hanama, Nága, and Timma; and among women Durgava and Hulgeva Their house gods are Hanumán, Durgava, Hulgeva, and Venkataramana. shrino of Venkataramana is at Tirupati in North Arkot, and of Huligeva at Hulgi near Hospeth in Bellári. They have two divisions, Kál Vaddars or stone-quarriers and Mán Vaddars or earth-diggers. The members of the two divisions cat together and intermarry. They are strong, muscular, tall, and black. They live in dirty ill-cared for huts made of grass mats and bamboos like the covers of untive carts, with an opening on one side, for getting in and out by. They keep asses to carry their house goods. Their ordinary food is Indian millet bread, pulse, and vegetables, and their holiday food is rice, wheat-breid, and coarse sugar. They can the flesh of fish, fowls, foxes, sheep, deer, hogs, crabs, and rats, but not of kine or of the hare. They are famous for their skill in catching rats and highly relish the rat as food. They use all intoxicating drinks and are proverhal drunkards. The men wear breeches, a headscarf, and a shouldercloth. The women wear a long robe the plain end of which is tied to the waist by a knot, the upper middle part of it is tucked near the navel, and the ornamental end is pasted over the leach, brought under the right arm, and carried over the left shoulder covering the breast and chest on its way, and again brought from behind under the right arm, and carried over the left shoulder, and head, and allowed to fall locely on the left shoulder. Young women are particular in dressing themselves in this fashion. A religious rule forbids their wearing the bodice. Men wear brass car and finger range, and women brass ear and note rings and neeklaces. They wear glass bangles only on their left writts and do not wear flowers in their hair or mark the'r brown with redpowder. They are hot-tempered, dirty, hardworking, and orderly. Their main calling is to make ponds and wells and to dig earth and stones for public and private works They also cut causls. They are very hardworking, and are always employed if any large work is in hand. Their digging tools are epides, pickaxes, and bamboo brokets for carrying the earth. They work from morning till evening except two hours at noon when they dine and rest. They are busy during the fair weather. They are well-paid, their employment is steady, and few

Chapter III.
Population.

Vaddars.

Chapter III.
Population.
WANDERERS.
Vaddars.

are in debt. They keep the regular Hindu holidays. They rank among low class Hindus. A family of five spends about 12s. (Rs. 6) a month on food, and 8s. (Rs. 4) a year on dress. A hut or tent costs 2s. to 4s. (Rs. 1-2) to make. Their house goods are worth about 16s. (Rs. 8), a birth costs about 2s. (Re. 1), a marriage about £5 (Rs. 50), a girl's coming of age about 4s. (Rs. 2), and a death about 8s. (Rs. 4). They do not respect Brahmans or call them to their ceremonies. They act as their own priests on ceremonial occasions. They occasionally worship Durgava the goddess of cholera, and make pilgrimages to the shrine of Venkataramana at Tirupati. They have no spiritual teacher. They believe in sorcery witchcraft and soothsaying. As soon as a child is born its navel cord is cut, the mother is given a little liquor to drink, and the mother and child are put to bed. For four days the mother is fed on Indian millet gruel, and on the fifth pepper, ginger, ajván Carum ptychotis, coarse sugar, poppy seeds, cocoanuts, and oil are pounded and mixed together and made into balls. One of these balls and a little liquor are given to each of the relations and friends. The child is laid in a cradle and named by the midwife and from that day the mother is ready to work. marriages as a rule take place on Sundays provided the day does not fall on a new-moon or a full-moon. The day before the wedding the bride and bridegroom are rubbed with turmeric and oil five times, bathed in warm water, and made to sleep in a blanket booth with a girl eight or nine years old between them. On the wedding day the bride and bridegroom are again rubbed with turmeric, bathed in hot water, and made to sit on rice sprinkled over a blanket spread on a raised seat, and all present throw grains of red rice over the pair. On the same day a feast without flesh is given to friends and relations, and on the eighth day a feast with flesh is given to members of the caste and the wedding is over.1 The dead are buried. On the third day after a death a fowl is killed, its flesh and rice are cooked separately, taken to the burial ground with an earthen pot filled with water, and set on the grave as an offering to the dead. The person who carries these things on his return does not look behind him. In the evening of the same day the four men who carried the body to the burial ground are feasted and no further funeral rites are observed. The Vaddars are bound together by a strong caste feeling. Social disputes are settled by a majority of the caste; any one who disobeys their decision is put out of caste. They do not send their children to school, take to no new pursuits, and are a

BEGGARS.

Beggars according to the 1881 census included thirteen classes with a strength of 6845 or 0.86 per cent of the Hindu population. The details are:

¹ In their marriage the Vaddars do not use any of the five articles generally used by Hindus, the mangala sutra or lucky thread, glass bangles, flowers, a bodice, and the báshing or marriage crown.

Didrectr Cartes, Beggars, 1881.

District.	Males	Tr.	Total	Distriot.	N2)(*	Fe-	Tutat
If the or Barbe Pairings Bulled Life Guilled Guilled Guilled He'asards	The state of the s	7 12 13 14 15 15 15 15 15 15 25	101 101 102 103 103 103 103 103 103 103 103 103 103	Joris Rib Climans Madanus Frainis Frainis Frainis Frainis Frainis	20 15 15 10 20 20 20 20	256 600 8	100 100 27 700

" Not shown in the orrang.

Chapter III. Population. Browns.

Maratha Bhát.

Mara'tha Bha'ts, or Bards, are returned as numbering thirteen and as found in Bankapur, Hubli, and Ranchennur. They are found in large numbers in Maisur and occasionally come north to Dharwar. They speak Maráthi and Telugu among themselves, and Kánarese with the people of the district. The names in common use among men are Hanmantrao, Nagojirao, and Ramrao; and among women Durgábái, Jánkibái, and Narsubái. Their surnames are Jádhav. Kadam, Kamble, and Sinde. Their chief god is Vithoba, and their chief goddesses Ambabai, Durgava, and Yellamma. They have no divisions. Bhats are tall and fierce-looking with regular features. They live in dirty and ill-cared for thatched houses. They are great enters and bad cooks. Their daily food is Indian millet bread and gruel, pulse, and vegetables, and their special holiday dish is flesh. They sacrifice sheep and fowls to their goddeses Durgava and Yellamma and eat their flesh. They use intoxicating drinks The men wear a pair of long trouvers, a coat hanging to the knee, a large turbin, and a thoulder-kerchief. They hold a long spear in their right hand with five or six pieces of coloured cloth tied to the point. Their women dress like ordinary Maritha women. Tho men wear brass or copper finger rings and wristlets, and the women wear ear finger and nose rings, wristlets, and glass bangles. They are hold honest and even-tempered, but idle, unclean, and untidy. Their chief calling is to praise any one they meet, and beg for money and clothes. Their women do house work and occasionally new the quilts, coats, and bodices which are used by the lower Their calling is declining as few leten to their praises. They spend nothing on food. A but costs them about £2 (Rs. 20) A birth co to them about 10s. (Rs. 5), a marriage to build. about £5 (Rs. 50), a girl's coming of age about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, respect Brahmans, and call them to conduct their marriages. They keep the leading Hindu holidays. They wor hip the village godderses Dayamava and Durgaya, and profess not to believe in sorcery, witcheraft, or sootheaving. When a child is born its navel cord is cut, and the mother and child are bathed and a few drops of caster-oil mixed with tugar are put in the child's mouth. On the fifth day the goddees Sathi is worchipped and a carte-dinner is given, and on the ninth the child is named and cradled. No further ceremony takes place till marriage. A day before the marriage a feast is given in honour of the family gods, and, on the wedding day, the bride and bridegroom are rubbed with turmeric and bathed, and are seated

Chapter III.

Population.

Beggars.

Marátha Bháts.

on a blanket spread on a raised seat. The village astrologer comes, repeats texts, and throws red rice on the pair, and women sing marriage songs and wave lighted lamps round their faces. Next day the couple is seated on horseback and taken to the temple of their goddess Durga where they offer the goddess a cocoanut, plantains, and betel and go home. After a death the body is seated, decked with new clothes flowers and ornaments, and taken in a car-shaped bier to the burial ground and buried. They are bound together by a strong caste feeling. Social disputes are settled by the castemen and any one disobeying their decisions is put out of caste. They send their children to school, take to no new pursuits, and are a falling class.

Bairágis.

Baira'gis, numbering about thirty-five, are beggars from Upper India. They stay in Dhárwár and beg for a few days and move on to some other halting place. They are tall, strong, and well-featured. Their home speech is Hindustáni.

Budbudkis.

Budbudkis, a class of Marátha fortune-tellers, are returned as numbering about one hundred and as found in Gadag, Kod, Navalgund, and Ron. They do not generally live in one place, but go from village to village telling fortunes and begging. They speak impure Maráthi. The names in common use among men are Bharmáji. Durgáppa, and Shiváppa; and among women Bharmakka, Nagava. and Savakka. Their common surnames are Garad, Ghavat, Parge, and Sindgan. Their family deities are Durgava, Udchava, and Yellava. A boy and a girl of the same surname cannot intermarry. A Budbudki may be known by his curious dress. He wears a loincloth, a long coat reaching to his ankles, a large and round turban. and two or three shouldercloths, and hangs all over his body several handkerchiefs to the ends of which brass bells and shells are tied. He holds in his right hand a small double drum to each side of which two strings each two inches long with a knob at the end are tied, and two hollow brass rings containing pebbles are fastened. The Budbudki turns the drum right and left in quick succession and the knobs strike the sides of the drum making a bubbling noise, and the pebbles in the hollow brass rings jingle together. On his chest is fastened the skin of some bright coloured bird and on his brow is a round sandal paste mark. The women dress like ordinary Marátha women. They are too poor to wear ornaments, except a magical silver ring which the men wear on the fourth finger of the right hand. The women wear ear and nose rings of brass and Most of them live in small dirty huts which are untidy and ill-cared for. They are great eaters and bad cooks. Their daily food is Indian millet bread, pulse, salt, and chillies, and their special holiday dish is flesh. They occasionally sacrifice sheep and fowls to their goddesses and to the tombs of Musalmán saints. They are excessively fond of intoxicating drinks. Their fortunes are generally so full of nonsense and lies that Budbudki is a regular Dharwar term for a liar. They are idle, dirty, and untidy. main calling is to wander from house to house and village to village telling fortunes and begging. They rise about three in the morning, go to some ruined buildings or some large trees outside of the village, and consult the spotted owlet or pingala, whose notes they

understand. About four or five o'clock they come back into the village, and, standing at the door of each house and sounding their double drum, awaken the people and tell their fortunes. forecast sometimes includes one or two not unlikely misfortunes and the inmates growing uneasy come out and ask the Budbudki how the misfortunes can be avoided. He tells them what to do, receives a money fee, and wanders on from house to house till nine in the morning and then goes home. In the evening they also go about the streets, but do not pretend to tell fortunes and beg for alms like other beggars. Their calling is declining as few listen to their prophecies. They spend nothing on food. A hut costs about 10s. (Rs. 5) to build and their house goods are worth about 6s. (Rs. 3). A birth costs about 10s. (Rs. 5), a marriage about £8 (Rs. 80), a girl's coming of age about Is. (Rs. 2), and a death about 10s. (Rs. 5). They are religious, respect Brahmans, and call them to conduct their marriages. Their other ceremonies are conducted by priests of their own caste who are called ganacharis. They keep the leading Hindu holidays but never go on pilgrimage to any shrine. They believe in sorcerers, witches, and soothsayers, and consult them when sickness or other misfortune falls on the family. Their religious rites and ceremonies are like those of Marathas. If a Budbudki's wife runs away from her hu-band the ganachari sends for the woman and her lover and asks the woman whether she wishes to return to her husband or to stay with her lover. If she prefers her lover the priest allows her to stay with him if she pays the priest £1 (Rs. 10). When he receives the money the priest heats a nim twig, lays it on the tongue of the woman and of the man, and tells them to go. Should the woman prefer to stay with her husband she is allowed back on paying him 10s. (Rs.5). Child and widow marriage, polygamy, and divorce are allowed, and polyandry is unknown. They are bound together by a strong caste feeling Social disputes are settled by their castemen and their priest and any one who disobeys their decision is put out of caste. They do not send their children to school, take to no new pursuits, and on the whole are a falling class.

Gollars, numbering about 3800, are a class of wandering beggars. They generally live in the skirts of towns and villages. Their home speech is Telugu, and they speak Kanarese out of doors. The names in common we among men are Bhima, Hanama, and Ninga; and among women Basava. Giriyava, and Ningava. They have no surmames or family gods. They worship Hanuman, Hulgeva, and Yellamma. They include five divisions, Ambir Wandlu, Bindu Wandlu, Cheern Wandlu, Galla Wandlu, and Gobbar Wandlu, who eat together and intermarry. A hoy and a girl of the same division cannot intermarry. They are dark, robust, and muscular. They have no fixed houses but generally live in small reed huts which can be opened folded and carried from place to place at pleasure. Their daily food is balls of ragi-flour and rice. They eat flesh and drink liquor whenever they can afford to buy them. The men wear a loincloth about six inches broad, a blanket, and a piece of cloth about two feet broad and four feet long to cover the head. The women wear a robe and

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Gollars.

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Beggars.

Golldrs.

a bodice without passing the skirt of the robe between the feet. The men wear brass wristlets and finger rings, and the women brass ear and nose rings, bracelets, and glass bangles. They are dirty, idle, and hot-tempered, and some of them are given to stealing. Their main calling is begging. When they go begging they carry a round basket with their god a live cobra which they show to people and ask for alms. Some of them occasionally hunt and labour for hire, and others sell forest roots as cures for snake-bite. spend nothing on food. A girl's marriage costs about 6s. (Rs. 3), and a boy's £1 2s. (Rs. 11) as he has to give the girl a dowry of 16s. (Rs. 8). They do not respect Brahmans or call them to their marriages. On some Tuesday or Friday, at any time during the year, they wash the images of Hanuman and Yellamma, and burn incense before them. To Hanumán they offer flowers, sandalwood paste, plantains, and cocoanuts, and to the goddess Yellamma they offer a goat. They rub turmeric powder on the brow of the goat, burn incense before it, cut its throat before the goddess, cook the flesh, offer it to the goddess, and then eat it and drink liquor. They have no spiritual teacher. They believe in sorcery, witchcraft, and soothsaying. When a child is born its navel cord is cut and the child is bathed. On the third day the images of Hanuman and Yellamma are worshipped, and the child is named and cradled by the midwife. When a marriage is settled, a shed with twelve posts is built in front of the bride's hut, and twelve earthen pots filled with water are kept at the posts, worshipped, and allowed to remain there five days. On the first day friends and relations are feasted on animal food in honour of their gods; on the second day the bride and bridegroom are rubbed with turmeric and bathed; on the third day a feast of sweet cakes and animal food is given; and on the fourth day the maternal uncles of both the bride and bridegroom tie yellow wristlets or kankans to the couple's right wrists, their brows are marked with turmeric powder and marriage coronets of oleander or bangoh leaves are fastened round their heads. bridegroom ties the lucky thread round the bride's neck, betelnuts and leaves are served to the guests, and five women whose first husbands are alive sing marriage songs and call with a loud voice Vy bhagiamo that is May the bride and bridegroom prosper. On the fifth day custe people are feasted on flesh and liquor, and five women whose first husbands are alive send the bride and bridegroom into their room, and from that time they live together as husband and wife. When he sends the bride to her husband's house her father presents his son-in-law with a dog. Should the bride ever afterwards wish to visit her parents she is not allowed to go alone or even with some member of the bridegroom's family. The husband himself must go with her, stay for three days and return with her. When a girl comes of age a branch of the lakki tree is fixed in the floor of one of the rooms in the house, and the girl is made to sit under the branch for three days, and on the fourth day she is bathed and is pure. No future monthly sickness is held to make a woman impure. The dead are buried. On the third day a Lingayat priest is called, his feet are washed, three copper coins are placed

on his right foot and two on his left, incense is burnt before them. and a few drops of the water in which the feet are washed are sipped by the members of the family. The priest gives them white ashes which they rub over their body and are purified. Gollar women are said almost never to commit adultery, and even for adultery a man may not divorce his wife. If a woman is taken in adultery a hole about two feet deep is dug in the ground, and the adulteress is made to stand in the hole. Thorns are spread round the edge of the hole and the woman is made to sit on the thorns with her feet in the hole, as if on a chair. A grindstone is set on her head and she is made to drink three small spoonfuls of cowdung The people of the caste lecture her and sho mixed with water. is considered to be purified and her husband continues to live with her. Child marriage and polyandry are not allowed, but widow marriage and polygamy are practised. They are bound together by a strong caste feeling, disputes are settled by a majority of the caste people, and if their decision is not obeyed the offender is put out of caste. They do not send their children to school, take to no new pursuits, and on the whole are a steady class.

Gosa'vis are returned as numbering about one hundred, and as found in Dhárwar, Gadag, Hubli, Kalghatgi, Karajgi, Kod, and They speak Hindustani The names in common use among men are Hanmantpuri, Kisunpuri, and Rampuri, and among women Champagiri, Chambeligiri, and Fulgiri. They have no surnames They have four divisions, Bau, Bharti, Giri, and Puri, all of whom cut together. Except a few Bans and Giris none are married. They are dark and leau. The men wear a red ochre loin and shouldercloth, and some of them wear only a loincloth about nine inches broad and two feet long. The women wear a white robo without passing the skirt back between their feet. They have no houres, and generally live in temples and monasteries. Their duly food is rice, Indian millet bread, pulse, and vegetables. They cat flesh and drink liquor to exces. Many wear a necklace of rudodish Eleocarpus lanceolatus berries. They are quarrelsome, idle, intemperate, and Their main calling is to wander from house to house begging. They are idle and pass their time in talking, sleeping, and drinking bhong or smoking hemp and tobacco. Almost their only expense is 6d. (4 as.) a month for bhang. They pretend to be very religious and carry a ling with them and an image of Hanuman which they daily wor-hip. They do not observe the sixteen sanskars or secrements. When a man wishes to become a Gosavi his head is clean shaved, he is anointed with oil and water, a Gosávi blows into his car, and cays Om coham that is I am he, meaning that the soul and the universe are one, and he becomes a Gosávi. dead me buried sitting. They are not bound together by a feeling of caste, take to no new pursuits, and on the whole are a falling

Gondhalga'rs are returned as numbering about 150. They are Maiáthás by caste and are found in Dharwar, Baukapur, Hángal, Karajgi, Kalghatgi, and Ron. They are votaries of the goddess Ambábhaváni or Tuljábhaváni of Tuljápur in Sátára. Three or four of them go begging daily, one of them with a double drum in

Chapter III.
Population.
Brogars.
Golldrs.

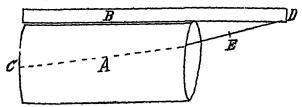
Gordeis.

Gondhalgars.

Chapter III.
Population.
Beggars.
Gondhalgdrs.

his hand, another with a one-stringed instrument called chaudki.1 a third carrying a torch, and a fourth a jolgi or wallet and a cowrie necklace. They sing and perform a gondhal or confused dance and extort alms in the name of the goddess Amba. In return they bless the givers and give them a pinch of turmeric powder called bhandar which is sacred to their goldess. When called by Marátha Bráhmans or Maráthás, they go to their houses and perform the gondhal ceremony for a whole night and are well fed and paid. Their home tongue is Maráthi but they speak Kánarese with the people of the district. The names in common use among men are Hanmanta, Satváji, and Yelláppa; and among women Bharmava, Yellava, and Yemnava. Their surnames are Garod, Guru, Pachangi, and Wugde. Their family goddess is Amba or Tuljábhaváni of Tuljápur. They have no divisions. They are tall and strong. The men wear a loin and shouldercloth. a long robe, a cap covered with cowrie shells which are sacred to their goddess Amba, and shoes; and the women wear a robe and bodice like other Maratha women. They live in dirty and ill-cared for thatched houses. They are great caters and bad cooks. Their daily food is Indian millet bread pulse and vegetables, and their special holiday dishes are sweet cakes and flesh. They are excessively fond of intoxicating drinks. The mon wear brass ear and finger rings and necklaces of shells, and the women wear silver armlets and toe rings, and nose rings of brass wire and false pearls. They are hospitable and even-tempered, but dirty and idle. Their main calling is to beg and to perform the gondhal coremony. Their calling is declining as people do not ask them to perform the gondhal so often as they used to do. When a gondhal is to be performed the Gondhalgars are sent for, fed, and paid for dancing and singing. The giver of the dance asks friends and relations. The Gondhalgars keep singing and dancing the whole night. About five in the morning one of the Gondhalis becomes possessed with the goddess, dashes from one place to another, jumps and dances with frantic

¹ The chaudki, which is sacred to Amba or Tuljábhaváni consists of :



A, a hollow round cylinder of wood or metal, about a fool inches broad; B, a round and solid rod about twenty inches lon red in the outside of the cylinder. One end of a catgut string in the centre of the inside of the cylinder A, and the other end is a nice to the end of the rod B at the point D. The Gondhali holds the cylinder under his left arm with the rod. Upwards he strikes the string at the point E, with a wooden pin held between the thumb and the two first fingers of the right hand. Every stroke gives a sound like pluck pluck and this serves as an accompaniment to the Gondhalis singing the praises of the goldess Amba or Tuljabhayani. The chaudki is worshipped by the votaries of the doity, with turmeric powder, redpowder, sandal paste, flowers, incense, lights, and food.

energy, and foretells future events. The people fall at his feet one by one, and each makes him a present of \(\frac{1}{4} \) anna (\(\frac{1}{2}d. \)). Gondhalgar then takes a lighted torch and touches his own body all over with the lighted end, but without doing himself any harm. He rubs the brows of all present with the turmeric powder offered to the goddess. At the close of the dance the leading Gondhalgar takes an unsewn bodice about eighteen inches broad and three feet long and holds two ends of it in front of the image of Tuljábhaváni and asks the hostess who will hold the other two ends. To hold the ends of the bedice is considered a high honour and the host and his wife discuss whether she or one of her daughters-in-law is to enjoy it At last one of them is told to step forward and holds the two ends of the bodice between the Gondhulgar and herself. The bodice is then formed into the shape of a cradle, and in this cradle a wooden doll is laid and rocked for a few seconds. The Gondhalgar then takes the doll out of the bodice and lays it with a little turmeric powder in the girl's lap. He asks for her husband's name and she gives it, and after falling before the idol she retires. This ceremony ensures the birth of a son before the year is over. After this, the torches that were lit during the night and placed before the goddess are put out in a cup full of milk and clarified butter, and the gondhal ends at about half-past six in the morning. They rank among lower class Hindus; high class Maráthas consider it below their dignity to cat or marry with them; low class Maráthás sometimes eat at the same time as the Gondhalgars, but sit at a distance. They generally live on food gathered by begging. A hut costs about £1 10s. (Rs. 15) to build. A birth costs about £1 (Rs.10), a marriage about £10 (Rs. 100), a girl's coming of age about 10s. (Rs. 5), and a death about 8s. (Rs. 4). They are very religious, respect Brahmans, and call them to conduct their marriages. They keep the leading Hindu holidays and also the Musalman Moharram. They go on pilgrimage to the shrines of Tuliabhavani in Satara and of Yellamma in Belgaum. They have no spiritual teacher. profess not to believe in sorcery, witchcraft, or soothsaying. On the birth of a child its navel cord is cut, and a dinner is given to caste people, and on the seventh day the child is named and cradled. No further ceremony is observed till marriage. A day before the wedding day the bride and bridegroom are rubbed with turmeric and bathed, and on the wedding day they are scated on a raised seat, five married women whose husbands are alive place four earthen vessels at the four corners of the seat, and pass a white thread five times round the vessels. The village astrologer comes and makes the bride and bridegroom stand opposite each other, the bride facing west and the bridegroom facing east. He holds a white cloth between them, repeats sacred hymns, and throws red rice on their heads. A casto feast is given and the ceremony is They burn their dead. Child and widow marriage and polygamy are allowed, and polyandry is unknown. They are bound together as a body. Social disputes are settled by castemen, and any one disobeying their decisions is put out of casto. Casto authority is steady. They do not send their children to school, take to no new pursuits, and are a falling class.

Chapter III.
Population.
Blundes.
Gondhalydes.

Chapter III.
Population.
Beccars.
Helávars.

Hela'vars are returned as numbering about 280 and as found all over the district. The founder of the class is said to have been a lame beggar who went about riding on a bullock. He held a bell in his hand, which he rang in front of every house in the street, repeated the genealogy of each family, and in return got alms. The present Helavars though not lame follow their founder's example. They speak Telugu at home and Kanarese The names in common use among men are Halgappa, abroad. Mallappa, Nagappa, and Ningappa; and among women Barava, Hulgeva, and Nagava. They have no surnames. Their only family deity is the goddess Hulgeva whose shrine is at Hulgi near Hospeth in Bellari. They have no divisions. They are weak and dirty. The live in dirty ill-cared for houses with mud walls and thatched roofs. They are great eaters and bad cooks. Their daily food is Indian millet bread, vegetables, tamarind, chillies, salt, onions, and garlio. Their special holiday dishes are rice, milk, coarse sugar, and butter. and the flesh of sheep, pigs, or fowls. They are excessively fond of intoxicating drinks. The men dress in a loin and shouldercloth, a short coat, and a headscarf, and the women in a long robe and bodice without passing the skirt between the feet. Both men and women are dirty in their dress. They have no stock of clothes either for ordinary wear or for special occasions. The men wear copper or brass car and finger rings, and the women besides ear and finger rings wear silver armlets and wristlets, glass bangles, and a nose-pin They are honest, even-tempered, hospitable, and called mugti. orderly but idle and dirty. They rank with other beggars. They spend nothing either on food or on clothes. A house costs them about £2 10s. (Rs. 25) to build. A birth costs them about 2s. (Re. 1), a marriage about £2 10s. (Rs. 25), a girl's coming of age about 4s. (Rs. 2), a pregnancy about 2s. (Re. 1), and a death about 10s. (Rs. 5). They do not respect Brahmans and conduct their own ceremonies. They keep the leading Hindu holidays. They have no guru or spiritual teacher. They believe in sorcery witchcraft and soothsaying. As soon as a child is born a little coarse sugar mixed in castor-oil is dropped into its mouth and the navel cord is cut. The after-birth is put into an earthen vessel, sprinkled with redpowder, incease is burnt before it, and it is buried on the spot where the child was The mother and the child are bathed. On the fifth day the Two two-feet long sticks are struck child is named and cradled. into the ground about three feet apart, two ropes are tied to them, and a doubled piece of cloth is thrown over the ropes and made into a hollow, and the child is put into the cloth and rocked as if in a cradle. When a marriage is settled the bride and bridegroom are rubbed with turmeric, bathed, and made to sit on a blanket spread on a raised seat. Yellow threads are tied round the right wrists of the bride and bridegroom, grains of red rice are thrown over them, a feast is given to friends and relations, and the ceremony is over. When a girl comes of age she is bathed and made to sit apart for three days. On the fourth day she bathes and is considered pure. Births and deaths cause no impurity. and widow marriage and polygamy are practised, and polyandry is unknown. They are bound together by a strong caste feeling.

Their social disputes are settled by a majority of castemen and any one who disobeys the decision is put out of caste. They do not send their boys or girls to school, take to no new pursuits, and are a steady class.

Kshetrida'sas Devda'sas literally God Servants, \mathbf{or} numbering about forty-five, are a class of wandering beggars who are found scattered over the district in small numbers. Their ancestors are said to have come from Kadapa in Madras to gain a livelihood. Their home speech is Kanarese. The names in common use among men are Bhimdas, Gangadas, Rangadas, and Timmádás; and among women Rangava, Timmi, Yengeramma, and Yenkava. They have no surnames. Their chief gods are Venkataramana of Tirupati in Madras, Máruti of Kadarmandali in Ránebennur, and Manjunáth of Udpi in Kánara. They have no divisions or family stocks. A Kshetridása may be known by his strange dress. A streak of white earth or gopichandan stretches from the tip of the nose to the middle of the brow, with a red mark in the middle of the white streak. He wears a turban of two long strips of cloth twisted together like a rope, a long coat falling to the knee, a pair of trousers, brass ear-rings containing false pearls, brass wristlets, and several necklaces made of sweet basil wood. He holds three or four handkerchiefs and a bundle of peacock feathers in his left hand, covers his back with the skin of a tiger or deer, and hangs round his neck a circular plate about three inches in diameter and a quarter of an inch thick containing an image of the monkey god Hanumán, a leather wallet on his shoulder to receive the alms given to him, and a conch shell on his right shoulder. From his right wrist hangs a gong about a quarter of an inch thick and nine inches in diameter and in his right hand he holds a gunki or a round piece of wood about six inches long and one in diameter, to strike the gong. He goes from house to house, striking the gong, blowing the shell, repeating the names of his god, and begging alms. The Kshetridásas are like ordinary low class Dhárwár Hindus. They have no fixed homes. Their daily food is Indian millet bread, onions, garlie, salt, chillies, and vegetables, and their holiday dishes are the same but of better quality. They eat the flesh of deer, sheep, fowls, and fish whenever they can afford it, but do not use intoxicating drinks. The women dress in a robe and bodice without passing the skirt of the robe back between their feet. The men wear brass ear and finger rings and the women brass ear and finger rings and a nose ring called mugti. The dress of both men and women is very dirty. They are honest, even-tempered, hospitable, and idle. Their main calling is begging. They eat only from Bráhmans, Vaishyás, and Jains. They keep most Hindu holidays. Their house goods are worth about 4s. (Rs. 2). A birth costs about 2s. (Re. 1), a marriage about £5 (Rs. 50), a girl's coming of age about 4s. (Rs. 2), a pregnancy about 2s. (Re. 1), and a death about 10s. (Rs. 5). They respect Brahmans and call them to conduct their marriage and other ceremonies. They make pilgrimages to Venkataramana at Tirupati. Their spiritual teacher is a Shrivaishnav Bráhman named Tátáchárya who lives at Benares, and to whom they pay homage whenever he visits them. They believe

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Beggars.

Kshetridásas.

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Population.
Brogans.
Kshetriddsas.

in sorcery, witchcraft, and soothsaying. They do not keep the sixteen regular sanskars or sacraments. As soon as a child is born its navel cord is cut and the after-birth is put in an earthen vessel and buried outside of the house. The child is anointed with castor-oil and bathed in warm water. On the thirteenth day the child is put into a cradle and named. Nothing further is done till marriage. On the day fixed for marriage the bride and bridegroom are rubbed with turmeric, anointed with cocoanut oil, and bathed in warm water. They are seated on a raised seat, and friends and relations are invited to witness the ceremony. The village astrologer comes, recites verses, and throws red rice on the pair. All present also throw rice, and betelnut and leaves are handed to the guests. In the evening a marriage dinner is given and the ceremony is over. They burn their dead. Birth, monthly sickness, and death cause impurity for nine, three, and five days. They are bound together by a strong casto feeling. Social disputes are settled by men of their caste, and, if the decision is not obeyed, the offender is put out of caste. They do not send their children to school, take to no new pursuits, and are a falling class.

Jogerus.

Jogerus or Jogis, originally Yogis that is meditators, a class of singing beggars are returned as numbering about 520 and as found all over the district. They are said to be very old settlers. The names in common use among men are Bhaira, Durga, and Sidda; and among women Durgava, Nimbava, and Ranava. Their house-gods are Bhairn whose chief shrine is near Ratnágiri, and Siddheshvar. They speak a rough incorrect Kánarese as well as They have four divisions Bhairi-Jogis, Kindri-Jogis, Maráthi. The Bhairis and Kindris eat and Paman-Jogis, and Tawar-Jogis. marry with each other; the Tawars and Pamans are separate. In appearance Jogis differ little from Budbudkis. They live in dirty ill-cared for thatched houses. They keep dogs, fowls, and sheep, and sometimes oxen to carry the soft slate-like stone which they make into stone vessels. They are great eaters and bad cooks. Their ordinary food is Indian millet bread, pulse, and vegetables, and their special holiday dishes are sweet cakes made of wheat-flour, coarse sugar, and pulse. They eat the flesh of hares, sheep, fowls, fish, deer, and crabs, but not of cows or pigs. They drink liquor whenever they can afford to buy it. The men wear a loin and shouldercloth, a jacket, and a headscarf, and the women a robe and bodice, without passing the skirt of the robe between the feet. Their supply of clothes is got by begging. The men wear ear and finger rings and necklaces of glass and brass beads, and the women ear, finger, nose, and toe rings, glass beads, necklaces, and brass and glass bangles. They are even-tempered but dirty, idle, and dishonest. Their chief calling is begging and they sometimes wander about the streets and carry off anything they can lay their hands on. sometimes pretend to be doctors and have a stock of roots for the cure of diseases. They also occasionally make and deal in fine smooth stone vessels. The stone for making these vessels is brought from the Kappat hills in Gadag. Their leading holidays are Dasara in September-October and Diváli in October-November. A family of five spends about 8s (Rs. 4) a month on food, and a hut costs about

Ss. (Rs. 4) to build. Their house goods are worth about £1 (Rs. 10). A birth costs about 1s. 6d. (12 as.), a marriage about £4 (Rs. 40), a girl's coming of age about 4s. (Rs. 2), and a death about 8s. (Rs. 4). They respect Brahmans and call them to conduct their marriage ceremonies. Their funeral rites are performed by mon of their own Their spiritual teacher or guru, Bhairinath by name, is said to live on the Badaganath hills near Ratnagiri. They worship the village deities Dayamava and Durgava, and believe in witchcraft, sorcery, and soothsaying. As soon as a child is born they cut its navel cord and bathe the mother and child. On the fifth day the goddess Sathi is worshipped to secure long life to the child, and on the seventh day the child is named and cradled. A day or two before the marriage a sheep is sacrificed in honour of their family gods, and a feast is given to friends and relations. On the marriage day the bride and bridegroom are rubbed with turmeric, bathed, and made to sit on a raised seat. A Brahman priest and five women whose first husbands are alive tie yellow threads round the bride's and bridegroom's right wrists and throw grains of red rice on their heads A caste feast is given and the ceremony ends. The dead are buried and on the fifth day cooked food is offered to the deceased at the grave. Child and widow marriage and polygamy are allowed and polyandry is unknown. They are bound together by a strong casto feeling. Social disputes are settled by men of the caste, and any one who disobeys the decisions is driven out. They do not send their boys to echool, take to no new pursuits, and are a falling class.

Kabaliga'rs are returned as numbering about 1060, and as found mostly in Dharwar. They originally lived in Bellari and seem to have come to this district about fifty years ago. Their home speech is Teluga and they speak Kanarere with the people of the district. The names in common use among men are Bhimappa, Munestra, and Nagestra; and among women Bhimaya, Durgaya, and Nagaya. They have no surnames. Their family goddess is Yellaya whose chief shrine is at Savadatti in Belgaum. They have no rubdivisions. They are very dark. The men wear a turban, a waistcoat, and a loincloth. They gather human bair and plant it into ropes. They passone rope of hair several times over their left shoulder and under the right arm and tie a second rope round the right arm and fasten to it several strips of coloured cloth. The women wear a robo and bodico like ordinary lower class Hindu women. wear a pair of iron wrietlets on the right wrist, an iron armlet on the left arm, and rub red earth on their brows, shoulders, and eyes. The women wear brass car and finger rings, bracelets and glass bangles, and tattoo their foreheads and hands. They are idle, hottempered, dirty, and ill-behaved. Their chief calling is begging for alms. If nothing is given them, they cut their arms and other parts of their body till blood flows, and threaten to kill themselves. Their reed huts cost about 2s. (Re.1) to build. A birth costs about 1s. (8 as.), a marriage about £1 (Re. 10), a girl's coming of age and a pregnancy nothing, and a death about 2s. (Re. 1). They do not Their marriages respect Brahmans or call them to their ceremonies. are conducted by their spiritual teacher or guru and their other

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Kalaligárs,

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ceremonies by men of their own caste. Their spiritual teacher called Virupakshasvámi lives at Hampi in Bellári. They believe in witchcraft, sorcery, and soothsaying. When a child is born its navel cord is cut and the mother and child are bathed. The mother is given some liquor to drink, cocoa-kernel, coarse sugar, ginger, and pepper are pounded together and made into balls, and for three days one ball a day is given to the mother to eat. On the fifth day the mother is bathed on the spot where the after-birth was buried. She offers flowers turmeric and redpowder to water, and on the same day the child is named and cradled. When a marriage is settled they take the bride and bridegroom to Hampi where their spiritual teacher performs the marriage ceremony. They bury their dead, and, on the third day after death, carry a lighted earthen lamp to the burial ground, set it on the grave, and drink a little liquor. lamp is set on the grave they do not allow the Holayas to come near or look at it. Child and widow marriage and polygamy are practised They are bound together by a strong and polyandry is unknown. caste feeling. Their social disputes are settled by their spiritual teacher or guru. They do not send their children to school, take to no new pursuits, and are a falling class.

Mázálarz.

Ma'sa'lars are returned as numbering about twenty-three and as found in Kod and Navalgund. They generally live in the outskirts of towns and villages. They formerly lived at Penagondí and Hindupur in Madras and were driven to Dhárwár by the famine of 1876. The names in common use among men are Hanama, Bhima, and Rama, and among women Durgava and They speak Telugu and an Sangava. They have no surnames. impure and indistinct Kanarese. They are wandering beggars and have no fixed home. Whenever they go to a village they put up in the house of a Madigar or Mang for a week or two and then go to another village. They say that the Madigars are their parents and that they have every right to live on them. They have no cattle except one or two asses to carry their goods which include one or two blankets, a few earthen pots, one or two vessels, and a wooden ladle to turn the food while cooking. They are great eaters, using the flesh of sheep, fowls, dead bullocks, cows, buffaloes, and pigs. Their daily food is Indian millet bread, pulse, vegetables, and flesh, and their special holiday dishes are rice and sweet cakes. They are excessively fond of intoxicating drinks. The men wear short breeches, a waistband, a shouldercloth, a black or red turban, and shoes; and the women a robe and bodice. They are goodnatured, idle, and dirty. Their chief calling is begging especially from Madigars. Every Madigar family feeds them and gives them 3d. to 3d. (1-1 a.) in cash. They occasionally make a few coppers by practising rope-dancing, but they will not dance unless a goldsmith, a carpenter, or a blacksmith is present. Their food and clothing costs them nothing as they live by begging. goods are worth about 4s. (Rs. 2). A birth costs about 6d. (4 as.) and a boy's marriage about £3 (Rs. 30) including £1 12s. (Rs. 16) given to the girl's parents. Their family god is Venkataramana of Tirupati, who is represented as a man with four hands, the upper right hand holding the chakra or discus and the upper left the shankha

or conch. Their family deity is Durgava the goddess of cholera. They worship no other Brahmanic gods, show no respect to Brahmans. and do not call them to conduct their ceremonies. They act as their own priests. They have no spiritual teacher and never make pilgrimages. As soon as a child is born, to keep off sickness its sides are branded with a red-hot needle in the form of a cross, the child's navel cord is cut, and the child and mother are bathed. On the third day a ceremony called irala is performed when a fowl is killed and its flesh eaten with other food, and on the fifth day the mother is ready to travel. When a marriage is settled, a day before the marriage the images of Durgava and Venkataramana are worshipped and a dinner called devaratra is given to members of the caste. On the wedding day the bride and bridegroom are rubbed with turmeric, bathed in hot water, and made to sit on a blanket spread on a raised seat. A long piece of thread is tied round five earthen pots and round the right wrists of the bride and bridegroom, grains of red rice are thrown over the pair, a marriage-dinner called dharinta is given to friends and relations, and the ceremony is over. When a woman comes of ago she is made to sit by hereself for four days. On the fifth day she is bathed, and is made to touch either a babbul tree or a rui Calotropis gigantea bush and is pure. This is repeated after every monthly sickness. Birth and death cause no impurity. The dead are buried. On the fifth day after a death a fowl is killed in honour of the dead and its flesh is eaten by members of the deceased's family. This fowl dinner is their only funeral rite. Child and widow marriage and polygamy are practised and polyandry is unknown. When a woman commits adultery her husband and caste people meet together, abuse her, lay a stone on her head, and tell her that she may go wherever she chooses. At the same time they allow women who have committed adultery to marry again in the caste. Social disputes are settled by men of the caste and any one disobeying their decisions is put out of caste. They do not send their boys to school. They take to new pursuits, but are a falling class.

Sata'nis, also called Chátális, Kadris, Samagis, and Suragis' are a small community of lower class Hindus who mark their brows with a narrow yellow upright line between two broad yellow lines. In Maisur they are the priests of Holayás and are believed to be the followers of Chaitanya, and probably they take their name either from Chaitanya or Satáanana properly Sanátana one of Chaitanya's disciples. They neither marry nor cat with other castes. They eat from no one but a Bráhman. Their chief god is Venkataramana. They ask Bráhmans to perform their marriage and other ceremonies. They are tall, dark, and strongly made, and especially the women are clean and neat. They live on alms and do no work. They burn the dead. In Dhárwár it is very unlucky to meet a Satáni. Any one starting on business who meets a Satáni goes home, bows before his guardian, sits for a time, and makes a fresh start.

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PopulationBEGGARS.

Masslars.

Saldnis.

¹ Rice's Mysore, I. 311.

² Chaltanya was a Vai-huav religious reformer who flourished in Bengal about the beginning of the rixteenth century.

Chapter III.
Population.
Beggars.
Vaggayds.

Va'ggaya's, devotees of the god Mailar, numbering about 700. are found chiefly in Ranebennur. Members of any caste including Bráhmans can become Vággayás. In social matters each Vággaya follows the rules of his own caste. The Dharwar Vaggayas differ from the Vághias of Jejuri in Poona in almost no respect except that in Dhárwar there is no class of female devotees corresponding to the Jejuri Murlis. When a man in pursuance of a vow wishes to become a Vággaya he goes and tells his wish to the pujári or chief worshipper of the god Mailár at Gudguddápur in Ránebennur. The pujári invests him with the dress of a Vággaya, takes him before the god Mailar, and gives him bhandar or turmeric powder. From that day the devotee is called a Vággaya, barks at people like a dog, and begs for alms. The Vaggaya can be known by his dress. He wears a blanket or kámbal, a loincloth or langoti, and a headscarf or rumál. He ties one or two bells and pieces of tiger and bear skins round his waist, and hangs from one of his shoulders a deerskin bag to hold bhandar or turmeric powder. They give the powder to the people they meet and in return ask for money. They wear cowrie-shell necklaces and hold in their hands a brass or wooden bowl to receive alms. Brahmans who in fulfilment of a vow become Vággayás dress like other Vággayás but do not bark in public, and when the term of their vow is over they doff the Vággaya's dress and go home. Vággaya women wear the ordinary lower class Hindu robe and bodice. Both men and women are dirty and untidy. Most of them speak impure Kanarese and live in flat-roofed houses with walls of sun-burnt brick and mud. Their houses are dirty and ill-cared for. They are honest, goodnatured, and hospitable, but dirty and idle. Their main calling is to bark like dogs at all who come on pilgrimage to the shrine of the god Mailar and to beg for alms. They sometimes go begging all over the district. Their condition is declining as people are much less open-handed than they used to be in giving them alms. Their food charges are small, as they live on what they get by Their birth, marriage, coming of age, pregnancy, and begging. death charges vary according to the caste to which each Vaggaya family belongs. The family god of the Vággayás is Mailar whose chief shrine is at Gudguddapur near Ranebennur. Both Brahman and low class Vággayás respect Bráhmans, and call them to conduct their religious rites, and the Lingayat Vaggayas call Lingayat priests. In rites and customs each Vaggaya follows the rules of his Except Bráhman Vággayás all have some special own caste. Vaggaya ceremonies. On the bright tenth of Ashvin or October-November a great festival with thousands of pilgrims is held in honour of the god Mailar at Gudguddapur. On these occasions the Vággayás calling themselves Kudariavarus or horsemen come to the temple trotting, jumping, and running like horses with large whips in their hands. Each gives himself several smart cuts with his whip at each cut calling Malhari's name and through the power of his name feeling no pain. On the same day some of the Vággayás take a long iron chain, fasten one end to a post in the temple, and the other end round their own neck, and giving a violent jerk snap the chain, by the might of Malhari. In Gudguddapur five families of Holaya Vággavás have a round bar of solid iron about four feet long and one-third of an inch thick. One end of the bar is beaten flat till it is about an inch broad and is made very sharp. A member of the officiating family, for the families take the duty in turn, forces the sharp point of the bar into one of his calves and draws the bar through the hole. He next forces into the wound a round wooden peg about nine inches long and three quarters of an inch thick and draws it through to the other side. He binds the wound with a little bhandar or turmeric powder, and pierces his left palm near the wrist with an iron needle about a tenth of an inch thick and a foot long. The point of the needle is passed about two inches through the back of the hand. To the upper end of the needle a cross bar is fastened, and in the cross bar five upright bars are set. Each of the uprights is wrapped in a piece of cloth dipped in oil, and lighted, and the Vaggaya standing at the entrance of Malhari's temple waves the five lights round the god. When the waving is over he falls before the god, pulls the needle from his left hand, and says that, through the might of Malhari, he feels no pain. These ceremonies are performed three times a year, on the bright tenth of Ashvin or October-November, on the dark ninth of the same month or about a fortnight later, and on the February - March or Magh fullmoon. On the dark ninth of Ashvin or October-November the god is taken to a spot at some distance from the temple, on a brass or wooden horse, with lighted torches, and drums and horns. Thousands follow the god throwing at him plantains, flowers, and dates, and Vággayás surround him barking at the top of their voice. On all the three festivals hundreds of women, especially of the lower classes, go to the temple to fulfil their vows. They bring a chanchi or manyroomed wallet with betelnuts, leaves, cloves, cardamoms, lime, and catechu and tell the pujári or chief worshipper that they have vowed to offer the bag and its contents to the god and that they wish to fulfill their vow. The ministrant demands from each a fee of 1s. (8 as.), and, after receiving the fee, takes each of them one after the other into the idol's room and seats her on Malhari's cot. The woman offers the bag and its contents to Malhari, falls before him, and comes out. As this vow is a breach of the Hindu rule that a woman must give betel to no one but her husband strict women think it disgraceful and never make it. Vággayás seldom send their children to school, they take to no new pursuits, and on the whole are a falling class.

Depressed Classes according to the 1881 census included seven castes with a strength of 43,601 or 5.59 per cent of the Hindu population. The details are:

Dharwar Depressed Classes, 1881.

		4	Drarwa:	г Дерте	8860 (1009860) 1001.			
	CLASS.	Males.	Females	Total.	CLABS.	Males.	Females	Total
Bhangis Dhors Holayas Kotgars	•••	 5561 5561	41 162 6138 573	84 276 11,699 1162	Mádigárs or Mángs Mochigárs Samagárs or Chámbhárs Total	13480 113 1279 21,179	14132 110 1266 22,422	27,612 223 2545 43,601

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Population.
Beggars.
Vaggayas.

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Bhangis.

Bhangis, or Scavengers, are returned as numbering about eighty-four and as found in Dhárwár, Bankápur, Hubli, and Gadag. They do not form a separate caste, and are either Musalmáns or low caste Hindus. They are tall swarthy and lean. They dress like Holayás, and, with regard to religion and customs, follow the rules of the caste to which they belong, that is the Hindus follow the practices of low caste Hindus and the Musalmáns of low caste Musalmáns.

Dhors.

Dhors, or Tanners, are returned as numbering about 270, and as found all over the district. They speak impure Kanarese. The names in common use among men are Dováppa, Lakshmappa, and Sidappa; and among women Basava, Chinava, and Nagava. They have no surnames. Their family god is Sankleshvar whose chief shrine is in the Nizan's country between Sholapur and Kalyan. They have three divisions, Dhors who tan skins and sew leather bags, Hindustani Dhors who make horses grain-bags, reins, and all other leather work for horses and bullocks, and Budaligar Dhors who make budalis or dubbers that is leather vessels for oil and clarified butter. The members of these subdivisions neither eat together nor intermarry. They are dark strong and muscular and are like the local Holayas or Mhars. Their expression is unpleasing, the eyes are large, the nose high, the lips thin, and the cheeks gaunt, They live in small tiled or flat-roofed houses with walls of sun-burnt brick and mud. Their houses are very dirty and ill-cared for. Their daily food is Indian millet bread and regetables, and on holidays they cat sweet cakes, flesh, and rice. The tanning Dhors cat flesh by stealth though they profess not. The harness and leather-jar Dhors ent flesh of all sorts except swine, which they avoid because it is said they were once Musalmans. They use intoxicating drinks. The men dress in a loin and shouldercloth, a headscarf, and shoes; and the women in a robe and bodice without passing the skirt of the robe back between the feet. The men wear car and finger rings, and the women car finger and nose rings, wristlets, and armlets. Their main calling is tanning leather and making leather bags. They work from morning till evening except two hours at noon for meals and rest, and are helped by their women in their work. A family of five spends about 16s. (Rs. 8) a month on food. A house costs about £10 (Rs. 100) to build and their house goods are worth about £1 10: (Rs. 15). A birth costs about 10s. (Rs. 5), a marriage about £10 (Rs. 100), a girl's coming of ago about 10s. (Rs. 5), and a death about £1 (Rs. 10). They are religious, respect Langayat priests, and call them to conduct their religious coremonies. god is Basaveshvar, and they also worship the ling but do not wear it like other Lingayats. They keep the leading Hindu holidays especially Holi in April and Dirali in October-November. Their birth marringe and death coremonies differ little from these of other Lingayats. Girls are married either before or after they come of age. Widow marriage, divorce, and polygamy are practised, and polyandry is unknown. They are not bound togother as a body. They do not send their children to school and on the whole are a falling class. Holaya's, or Mhars, also called Jambus, numbering about 11,700,

are found all over the district. They have no memory of any former settlement and are probably one of the earliest classes in the district. They say that the first Holaya was named Jambu. At that time men were wretched and unsafe, living on an earth that swayed on the face of the waters. Jambu made its foundations sure by burying his son alive. In reward for this sacrifice the earth was called Jambudvipa or Jambu's land. The Holayás hold that they were the first owners of the land and that they were ousted by the higher castes. Holayas generally live in the outskirts of towns and villages. Their home speech is Kanarese. The names in common use among men are Hanma, Ninga, Rudra, and Yella; and among women Basaya, Hanmaya, Durgaya, and Udchaya. Their family goddesses are Dayamaya, Durgaya, Udchaya, and Yellaya. They have two divisions Holayas and Potrajas. They are strong, dark, and dirty. They live in dirty ill-cared for flatroofed houses with walls of sun-burnt brick and mud. Their daily food is Indian millet bread, pulse, and chillies. They carry off dead cows, buffaloes, and bullocks from the villagers' cattle shed, eat their flesh, and return the skins to the owners who sell them to Mádigárs. They are excessively fond of liquor. The men wear a loin and shouldercloth, a jacket, and a blanket, and the women a robe and bodice without passing the skirt of the robe back between the feet. The men wear ear and finger rings, and the women finger rings, armlets, bracelets, and toe-rings. Those of their women who are Basavis or Lingáyat temple-women unlike married women wear rings on their great toes. They are hardworking, hospitable and orderly, but so dirty that Holaya is a common Dharwar term for a sloven. Their main calling is carrying dead animals, making sandals, and labouring, especially at harvest time. A family of five spends about 16s. (Rs. 8) a month on food. A house costs about £3 (Rs. 30) to build. A birth costs about 2s. (Re. 1), a marriage about £3 (Rs. 30), a girl's coming of age about 4s. (Rs. 2), and a death about 10s. (Rs. 5). Most of them neither worship Brahmanic gods nor call Brahmans to conduct their marriages. They keep the Hindu holidays of Holihunvi and Ugádi in March-April, Nagpanchami in July-August, Dasara in October-November, and Diváli in November. They make pilgrimages to the shrine of Yellamma in Belgaum. Their spiritual teacher or guru is a man of their own caste named Balbasappa who lives in Bellari. They are great believers in sorcery, witchcraft, and soothsaying. When a child is born its, navel-cord is cut and buried in the front yard of the house. A stone is laid over it and the mother and child are bathed upon the stone. On the fifth day Indian millet is cooked into thick gruel, a small stone is kept in the lying-in room, and round the stone five lumps of Indian millet gruel are set on a piece of cloth which has been dipped in turmeric powder and water. The five lumps of porridge and a little coarse sugar are served in five dishes, and five women whose first husbands are alive are asked to eat the food. On the ninth day five sorts of grain, Indian millet, togari Cajanus indicus, hesru Phaseolus mungo, wheat, and madki Phaseolus aconotifolius are boiled together and seasoned in a little oil, and five women whose first husbands are alive are called and fed

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with Indian millet gruel and coarse sugar. The women lay the child in a cradle and sing. On the twenty-ninth day the child is taken to the temple of their goddess Udchava and is laid before the idel. pujári or ministrant cuts a betel leaf in the shape of a pair of scissors, and with them goes through the form of cutting the child's hair whether it is a boy or a girl. They ask the ministrant to find from the goddess what name should be given to the child. The ministrant consults the goddess and sits quiet for a while. He then suddenly utters a name and that name is given to the child. Flowers, turmeric, and redpowder are laid before the goddess and all go home. Next day or on some future day the hair on the child's head is cut and no further ceremony is performed till marriage. When a marriage is settled, the bride is given a dowry of £2 (Rs. 20) and sugar and betel are handed among her friends and relations. On the wedding day the bride's party go to the bridegroom's. If the bride is of age she goes walking; if she is not of age she is taken on a bullock. As they draw near the boundary of the bridegroom's village his party go and meet them with two plates, one with lighted lamps and the other with burning incense. Both plates are waved round the bride and The bride's party also wave lamps and incense round the bridegroom's party and they come together to the bridegroom's. The bride and bridegroom are seated in the marriage shed on a blanket, a Chelvádi or Lingáyat emblem-bearer repeats marriage-verses, throws red rice on the bride and bridegroom, and ties the lucky thread round the bride's neck. A feast is given to friends and relations and the ceremony is over. When a girl comes of age she is made to sit by herself for three days and is fed on boiled rice mixed with cocoakernel scraping and coarse sugar. On the fourth day she is taken to a bábbul tree and made to touch it with her right hand. She then comes home, bathes, and is purified. When a married person dies the body is carried sitting in a strong cloth to the burial ground and placed in the grave. When it is seated in the grave the Chelvádi or Lingáyat emblem-bearer washes its face, rubs it with white ashes, puts a small piece of gold worth 12d. (1 a.) into its mouth, and fills the pit with earth. The body of a Basavi or female devotee is buried with the same rites as the body of a married woman. The unmarried dead are taken to the grave in a lying not in a sitting posture and buried without washing the face, applying white ashes, or putting a piece of gold in the mouth. After a birth or a death the family are impure for eleven days. When a Holaya has one or more sons, besides daughters, he gives his daughters in marriage to proper bridegrooms. When he has no sons he makes one of his daughters a Basavi and keeps her in his house to look after him. To make a Holaya girl a Basavi, on a lucky day the girl is taken to the temple of the goddess Udchava with flowers, cocoanuts, and betelnuts and leaves. The pujdri or ministrant of the goddess worships the idol, ties a lucky thread of gold and glass beads round the girl's neck, rubs her brow with white cowdung ashes, and tells her that she has been made a Basavi and from that day is free to act the courtezan. From that day she maintains her parents and attends on the idol on great days and drives off the flies from the idol with a fan. After the death of her parents she inherits their property, and her daughters are given in marriage into good families. The Holayas are bound together as a body. Their social disputes are settled by their headman, the Chelvádi, and some leading men of the caste, and any one who disobeys their decision is driven out. Caste authority is steady among them. They do not send their children to school, take to no new pursuits, and are a steady class.

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Potrájás.

Potrájás or Buffalo Kings, are a class of Holayas. The story of the origin of their name is that their ancestor, in the disguise of a Brahman, became the husband of Dayamava an incarnation of the great goddess Lakshmi. They lived together for several years and had children. At Dayamava's request the Holaya brought his mother to their house. As they were eating some of Dayamava's sweetmeats the mother said to the son, How like this is to a roasted buffalo tongue. Dayamava finding how she had been deceived and degraded, burnt her house, slew her children, and pursuing her husband who had taken the form of a buffalo killed him. descendants of the husband are called Potrájás that is Buffalo Kings. They are a small body and are found in only a few villages. On Dayamava's fairs which last for eight days the Potrajas are sent for. On one of the eight days, several male buffaloes representing the Holaya who married Dayamava and a number of sheep representing his children are slaughtered before the deity. The officiating Potraja tears open the throat of a lamb with his teeth, and drinks its blood. On the last day of the fair, in a state of stark nakedness, he carries cooked rice on his head all round the village, throwing away a little, and slaughtering a sheep at each of its corners. On his return he receives a large share of the slaughtered buffaloes and sheep.1 In other respects Potrajás do not differ from Holayas.

Kotegårs.

Kotega'rs are returned as numbering about 1162, and as found in Dhárwár, Bankápur, Hángal, Karajgi, and Ránebennur. They generally live in the outskirts of towns or villages. They speak impure Kanarese. The names in common use among men are Chanjiyappa, Hanmappa, and Ninga; and among women Nili and Santangi. They have no surnames and no divisions. They are like Holayas, dark strong and muscular. They live in small dirty and ill-cared for straw huts. Their daily food is Indian millet bread, Indian millet gruel, and a few of the poorest vegetables, and even these they get by begging. They eat all animal food and drink all intoxicating liquors. The men wear a loin and shouldercloth, a headscarf, and a blanket. The women wear a robe without passing the skirt between the legs. They are idle dirty and quarrelsome. Their main calling is begging, and they occasionally work for hire. As a caste they rank with Holayas and Madigars. As they live by begging their food costs them almost nothing. They have no spare dress. A birth costs them about 11d. (1 a.), a marriage about £2 (Rs. 20), and a girl's coming of age, a pregnancy, and a death nothing. They have no family gods and no priests. They do not respect Bráhmans, Lingáyats, or other priests, and do not call

¹ A detailed account of these village rites is given in Appendix A.

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them to conduct their marriages. They act as their own priests during their ceremonies. They have no spiritual teacher and no holidays. They believe in sorcery, witchcraft, and soothsaying. When afflicted with any disease or misfortune they go to a Lingayat priest in the village of Kutnasanahalli in Hangal and ask his advice. He gives them an enchanted lemon to eat and some ashes to rub over their body, and the Kotegárs believe that cating the lemon and rubbing the ashes remove their sickness and other misfortunes. In their marriages the bride and bridegroom are scated on a blanket spread on a raised seat. The caste people meet and call in a loud voice Dhuri yeritu may that is The marriage has taken place. A few grains of yellow rice are thrown over the bride and bridegroom, a casto dinner is given, and the ceremony is over. The dead are buried and no funeral ceremonies are observed. They are bound together as a body, and their social disputes are settled by men of their caste. Caste authority is said to be growing weaker. They do not send their children to school, take to no new pursuits, and on the whole are a falling class.

Mádigárs,

Ma'diga'rs or Ma'ngs are returned as numbering about 27,500 and as found all over the district. They do all the leather work required for field purposes, and, in return, are allowed to take away all cattle that may die in husbandmen's houses and receive gifts of grain during harvest time. They generally live on the outskirts of villages and towns. Their home speech is Kanarese. The names is common use among men are Durgáppa, Fakiráppa, Hanmappa, and Yella; and among women Dayamava, Durgara, They have no surnames, and are Lingava, and Yellava. known by the names of the towns and villages in which they live. They have two divisions Madigars and Asadarus. They are strong, dark, and ugly. They live in dirty ill-cared for flat-roofed houses with walls of mud and sun-burnt brick. They are great enters but bad cooks. They eat the flesh even of dead cattle, and are excessively fond of intoxicating drinks. The men dress in a loin and shouldercloth, a coat, a headscarf, and a blanket; and the women in a robe and a bodice without passing the skirt of the robe between their feet. They use local hand-woven cloth. The men wear ear and finger rings and waistchains, and the women ear and nose rings and silver armlets. They are hardworking, but dirty, dishonest, quarrelsome, and ill-behaved. Their main calling is working in leather. They work from morning till evening except two hours for meals and a midday rest. The articles they make are always in good demand, but their intemperance and the large sums they spend on marriage and other ceremonies keep most of them in debt. A family of five spends about 12s. (Rs. 6) a month on food. A house costs them about £2 10s. (Rs. 25) to build, and the value of their house goods is about £1 (Rs. 10). A marriage costs them about £6 (Rs. 60), and a death about 6s. (Rs. 3). They are religious. Their family gods are Mailar and Hanmant, and their family goddesses are Dayamava, Durgava, and Yellava. Their chief hoildays are Holihunvi and Ugādi in March-April, Nágpanchami in August-September, Dasara in October-November, and Diváli in November. They have no guru or spiritual teacher. They profess not to believe in sorcery, witchcraft, or soothsaying. On the fifth day after a birth, a feast is given to friends and relations, and on the seventh day the child is named and cradled. No other ceremony is performed till marriage. When a marriage is settled they ask the village astrologer to find out a lucky day, and give him a small present for his trouble. On the lucky day the bride and bridegroom are seated on a low wooden stool, a thread is passed five times round them, they are rubbed with oil and turmeric and are bathed. The ends of their robes are tied together, they are seated on rice spread on a raised seat, a piece of cloth is held between them, and grains of red rice are thrown over them. A large dish filled with food and sweet estables is brought, and the bride and bridegroom and five other women whose first husbands are alive are made to sit near the dish and cat together out of it. The bride and bridegroom are taken on horseback to the temple of their family goddess, where they worship the goddess and return home. Next day a feast is given to men of the caste and the ceremony is over. The dead are either burnt or buried, and on the fourth day after death a sheep is killed, its flesh is offered to the spirit of the dead, and a feast is given to men of the caste. Social disputes are settled by a majority of caste people, and any one who disobeys the decision is driven out. They do not send their children to school, take to no new pursuits, and are a steady class.

Asádarus are a class of Mádigárs who are set apart to dance before and abuse the goddess Dayamava during her fair. When they dance, both men and women wear long, curiously worked, and dirty gowns. The women dance and the men hang large drums round their necks, beat them and make a horrible noise. One of them called Ranigia is supposed to represent the brother of the Holaya who married Dayamava under false pretences and was killed by her. This man stands before the idol, beats his head and chest and shows all signs of grief, and curses and loads the goddess with the vilest abuse. A very fow families of this class live scattered over different villages. They are called to the different fairs of Dayamava and Durgava, and are paid for their labour. They eat but do not marry with other Mádigárs.

Mochiga'rs, or Shoemakers, are returned as numbering about 220 and as found in Dhárwár and Gadag. They make new shoes for Bráhmans, Lingáyats, and Musalmáns. They do not make sandals, or sit by the road-side and mend shoes, which they say is the work of a Samágár the Kánarcse term corresponding to the Maráthi Chámbhár. They do not make ropes or other leather articles used in field work. The names in common use among men are Gangáppa, Gireppa, Nimbána, Sankáppa, and Yelláppa; and among women Ningava, Nilava, Nágava, Takava, and Yellava. They have neither surnames, divisions, nor family stocks. A Mochigár may be known by his dirty clothes and oily face. The women are still more dirty and ugly. In size, shape, and strength Mochigárs are like Mádigárs or Samagárs. They are black-skinned and their expression is dreamy. They speak an incorrect and indistinct

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Mochigars.

Kanarese. They are dirty in their habits, idle, and quarrelsome. Most live in dirty, untidy, flat-roofed houses. They keep cows sheep buffaloes and other domestic animals. They are great eaters but not good cooks. Besides grain they eat animal food especially on holidays. They eat the flesh of hare, deer, and sheep which have been killed by the Musalman Mulla. They never eat beef pork, or the flesh of animals which have died a natural death. They are extremely fond of intoxicating drinks. The men wear a loin and shouldercloth, a jacket, and a headscarf; and the women a robe and bodice. Their holiday dress does not differ from their every-day dress either in form or material, and they have no store of clothes either for daily use or for special occasions. The men wear a lock of hair on the crown of their head. The women either tie the hair in knots or wear it in braids. The men wear brass ear and finger rings and silver waistchains. The women wear silver armlets, waistbands, and earrings, and a gold nose-pin called mugti. Their main calling is to sew new shoes and weave coarse cloth. Their women help in their work. Their craft is flourishing as both their shoes and their cloth are in great demand. In spite of this they are in debt. Their caste position is low, though they hold themselves higher than Holayas, Samigars, and Madigars, and do not eat from their hands. They eat from the hands of Brahmans, Lingáyats, Maráthas, Jains, and other high classes but not from any low class Hindus, Musalmans, or Christians. Almost all classes hold aloof from Mochigars. Except at harvest time when they take to field work the Mochigans work at shoe-making and weaving. They keep the regular Hindu holidays. A family of five spends 14s. to 16s. (Rs. 7-8) a month on food and £1 10s. (Rs. 15) a year on dress. A birth costs about &s. (Rs.4), a marriage about £10(Rs. 100), a girl's coming of age about 4s. (Rs. 2), a pregnancy about 12s. (Rs. 6), and a death about 8s. (Rs. 4). Their chief house god is Basavana. They respect Brahmans and call them to their marriages, but have no family priests. They make pilgrimages to the shrines of Mahamalesha near Badami in South Bijapur and of Gonepa at Homigi on the frontier of the Madras Their spiritual teacher is a Lingayat priest, to whom Presidency. they show great respect when he visits their villages. The teacher in return blesses them and prays for their welfare. They believe in sorcery, witchcraft, and soothsaying. Their special ceremonies are putting a new-born child into the cradle, marriage, a girl's coming of age, pregnancy, and death. On the thirteenth day after a birth a few friends are called and the child is laid in the cradle and named, and friends and relations are feasted. The impurity caused by a birth or a death lasts thirteen days. Brahmans are called to their marriages, repeat verses, and throw red rice on the bride and bridegroom, and in return are paid 2s. to 10s. (Rs.1-5). other ceremonies of rubbing the bride and bridegroom with turmeric, tying on the marriage coronet or bashing and the chaplet of flowers, and giving feasts are the same as among other low classes. When a girl comes of age she is made to sit by herself for four days. On the fourth day she is anointed and bathed and on the same day or on some future day she is sent to live with her husband. They bury their dead and give the usual funeral feasts to friends and relations. Child and widow marriago and polygamy are practised, and polyandry is unknown. They divorce their wives for adultery and divorced women remarry. The Mochigárs have their own barbers, as ordinary barbers will not shave them. They are bound together by a strong caste feeling, minor disputes are settled by caste people, and more serious questions are referred to the Lingáyat teacher Sidayanavaru who lives at Sirsangi near Rámdurg. If his decision is not obeyed the teacher puts the offender out of caste by issuing an order to the caste people to hold aloof from him. If the teacher is paid a small sum as a fine he drops cowdung ashes and holy water into the offender's month and allows him to come back. Caste authority is strong and steady among them. They do not send their children to school, and take to no new pursuits; still they are a rising class.

Samaga'rs or Cha'mbha'rs, are returned as numbering about 2500 and as found scattered all over the district. They generally live on the outskirts of towns and villages. The names in common use among men are Devana, Dhankara, Dyamana, and Fakirappa; and among women Balava, Nagava, Ranava, Shankarava, and Yellava. Their only surnames are place names. The names of their gods are Hanuman, Virabhadra, and Basavána. They have neither divisions nor family stocks. They speak impure Kanarese. Samagárs are dirty, ugly, and like Holayas and Mádigárs. They are quarrelsome, drunken, and untruthful. Their main calling is to make shees and sandals and to mend old shees. They tan the skin of sheep, but not of cows or of buffaloes. They earn about 6d, (4 as.) a day. Their craft is steady. They are perhaps the lowest of local Hindus still they do not eat from the hands of Jingars, barbers, Holayas, or Kotegars. Their busy seasons are Holi-hunci in March-April, Nagpanchami in August-September, and Dasara in October-November. During the rainy season they have little to do. They keep the leading Hindu holidays A family of five spend about 16s. (Rs. 8) a month on food and £1 (Rs. 10) a year on clothes. A house costs about £5 (Rs. 50) to build and Is. (8 as.) n month to rent. A birth costs about 4s. (Rs. 2), a girl's marriage about £2 (Rs. 20), and a boy's £2 8s. (Rs. 21), on account of the girl's dowry, a girl's coming of age, and a pregnancy about 6. (Rs. 3) each, and a death about Sv. (Rs. 4). They are religious and respect both Bráhmans and Lingáyats. They call Bráhmans to conduct their marriages, and Lingavats to conduct their funerals. They worship both Brahman and Lingayat gods and keep tho leading Hindu holidays. They make pilgrimages to the shrine of Yellamma, who is represented as a woman sitting on a raised tent with weapons in her hands. They have few ceremonies except at marriages and deaths. Child and widow marriage, polygamy, and divorce are allowed, but not polyandry. They are bound together by a strong casto feeling. Social disputes are settled by men of the caste. They do not send their boys or girls to school, take to no new pursuits, and are a steady class.

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According to the 1881 census Dhárwár Musalma'ns numbered 100,600 or 11.39 per cent of the population. They include thirty-four classes of whom nine intermarry and are separate in little more than name and twenty-five are separate marrying among themselves only. The nine classes who intermarry belong to two groups, four general classes Syeds, Shaikhs, Moghals, and Pathans, and five local classes Attárs perfumers, Bedars servants, Bangarhárás bracelet-makors, Kaláigars tinsmiths, and Manyárs dealers in hardware. Of the twenty-five separate communities who marry among themselves, seven are of outside and eighteen are of local origin, The seven of outside origin are Bohorás and Mehmans from Gujarát. Mukeris and Soudágars from Maisur, and Labbeys from the Malabár coast all traders, Gáo Kasábs beef butchers from Maisur. and Kákars labourers and pony-keepers from Afghanistán. Of the eighteen separate communities of local origin, two, Bagbans fruiterers and Tambolis betel leaf sellers, are tradesmen; two. Kanjars and Pendhárás, are dealers in animals and labourers: seven, Gaundis stone-masons and bricklayers, Lád Kasábs mutton butchers, Momins weavers, Patvegars silk tassel-twisters, Pinjáras cotton cleaners, Rangrez dyers, and Saikalgars armourers, are craftsmen; five, Bhatyárás cooks, Dhobis washormen, Hajáms barbers, Halálkhors scavengers, and Pakhális watermen, are servants; and two, Kasbans dancing girls and prostitutes, and Táschis kettle-drummers, are musicians.

Of the four general classes, Syeds, Shaikhs, Moghals, and Patháns, the Moghals are a very small body. Each of the other three includes large numbers found in all parts of the district. They are chiefly local Hindus, the descendants of converts, who, on embracing Islam, took the title of the Syed, Shuikh, or Pathan, under whom they were converted. At the same time almost all claim, and probably most of them claim with right, some strain of foreign or Upper Indian blood. So far as they can be traced the foreign elements seem to be the same as those noted in the Statistica. Account of Belgaum, Arab traders and merchants who sought employment at the courts of Hindu rulers; Turks and other Upper Indians who conquered the Deccan at the close of the thirtcenth century; Abyssinian, Arab, Persian, Afghan and Turk settlers during the supremacy of the Bahmani 1347-1490, Bijápur 1489-1686, and Moghal 1686-1723 rulers, and finally, and, to a larger extent than in Belgaum, a foreign element from the court of Haidar Ali and Tipu of Maisur 1760-1800. As in Belgaum and other parts of the Bombay-Karnátak the conversions from Hinduism are almost all ascribed either to Aurangzeb (1686-1707), or to Haidar and Tipu of Maisur (1760-1800). The well known zeal of these rulers for the spread of Islam scems in many instances to have gained for them a credit which belongs to early Arab missionaries if not to the Bahmanis (1347 - 1490) or to the Bijápur

¹ From materials supplied by Mr. Syed Daud, Bombay Municipality.

kings (1489-1686). Except a few villagers and craftsmen who talk Kanarese at home, the home speech of the members of the four general classes is Hindustani, with a large mixture of Kanarese and Marithi. Of the special communities the Mohmans and Bohoras from Gujarát speak Cutchi and Gujaráti, and the Labbeys of the Malabar coast Malayalam. The members of the main body of Musalmans, and to some extent of the separate communities of foreign origin. have more marked features than the local Hindus. The men are larger-boned and sharper-featured, fairer, and with lighter oyes; the women show fewer traces of foreign blood and in many cases can hardly be known from Hindus. Musalmans of all classes take two meals a day, breakfasting about ten in the morning on millet or wheat bread pulse and vegetables, and some of the rich on mutton; and supping about eight in the evening on rice, millet bread, and pulse or vegetables. Some rich townspeople and most village husbandmen take three meals, the rich taking a breakfast at seven of wheat bread, eggs, milk, and tea; a midday dinner of rice or wheat bread and mutton with vegetables; and a supper at eight at night of rice or bread and pulse or mutton-curry. Husbandmen take a cold breakfast about seven, a midday meal in the fields, and a supper on reaching home in the evening. All of the meals are of millet bread and pulse with a good allowance of chillies and tamarind. Among the rich the chief dish at public dinners is biryani a dish of rice and mutton prepared with clarified butter and saffron, and jirda a sweet dish of rice, sugar, almonds, clarified butter, and saffron, and raila a dish of curds, mustard, and salt. These dinners cost £3 to £5 (Rs. 30 - 50) for every hundred guests. Among the poor public dinners consist of puláo a dish of rice and clarified butter, and dalcha a curry of pulse and mutton, and cost £2 to £2 10s. (Rs. 20 - 25) for every hundred guests. The richer families est mutton daily and most manage to get either mutton or beef on special occasions and on the Ramzan and Bakar Id festivals. All like mutton better than beef, and many local communities will on no account touch beef. Buffalo meat is eschewed by all. Fowls and eggs though not eaten daily aro used by the rich once or twice a month; and by the poor on special occasions whenever they can afford them. Fish though scarce is used by almost all Musalmans without objection. The staple food of all classes is grain and pulse. Among the rich and well-to-do, perhaps about twenty per cent of the whole, the grain in ordinary use is rice, wheat, millet, and pulse; and among the poor millet and pulse. The monthly food charges of a rich Musalman family of five vary from £2 to £4 (Rs. 20-40), of a middle class family from £1 to £1 10s. (Rs.10-15), and of a poor family from 8s. to 14s. (Rs. 4 - 7). Water is the usual drink, but some rich and well-to-do families, since the establishment of British rule, have introduced the use of ten and coffee. In spite of the religious rulo against its use intoxicating liquor is largely drunk. On account of their cost imported wines and spirits are little used; the two chief drinks are local, tidi or sindi the fermented juice of the date, and either mahura Bassia latifolia, or date spirits. Most craftsmen and many

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members of the main body of Musalmans are much given to the use of liquor. Of other stimulants and narcotics tobacco is smoked by almost all, snuff is used by some of the old and by the trading classes, and opium is occasionally used by some craftsmen, servants, and religious mendicants who also smoke gánja or hemp. The dress of the main body of Musalmans of Dharwar, Hubli, and Savanur is much better and more strictly Musalman than the dress of the Musalmans of other parts of the district. It includes a delicate white cotton turban wound in correct Musalmán fashion, a long white coat, a long shirt, a waistcoat, and a pair of loose trousers. Some of the Masháyaks or Pirzádás that is Saints' sons, and Syeds dress in a long Arab thaya for out-of-door use, and an overcoat either of silk. broadcloth, or fine muslin. Their women generally dress in the Hinda robe and bodice covering the back and fastened in a knot in front with short tight sleeves ending above the elbow. Some women of high families occasionally dress in tight trousers and cover the upper part of the body with a scarf or odni. All other communities of Musalmans dress in Hindu style. The men wear in-doors a headscarf, a shirt, and tight trousers, or a waistcloth. Ont-of-doors on all occasions if rich, and on festive occasions or holidays if middle class, they dress in a Marátha turban, a coat, and a pair of shoes. The whole of their every-day dress is made of cotton, but, for festive or ceremonial occasions, almost all have a silk turban and a silk-bordered waistcloth and a silk handkerchief. The value of a rich man's wardrobe may be estimated at £6 to £8 (Rs. 60-80). and his yearly expenditure on clothes at £2 to £3 (Rs. 20-30). In the case of a middle class or of a poor man the wardrobe is worth £2 to £5 (Rs. 20-50), and the yearly expenditure on clothes amounts to £1 to £1 10s. (Rs. 10-15). Once or twice a year, either on the Ramzán or Bakar Id festivals, Syeds generally colour their turbans and headscarves green, and others dye their, turbans red, crimson, or yellow. All women wear in-doors the full Marátha robe or sári in the same way as Hindu women, except that they wear it without tucking the skirt back between the feet. They also wear a tight-fitting short-sleeved bodice or choli, covering the back and the ends knotted in front under the bosom. The exceptions to this style of dress are the Bohora and Soudágar women, who wear a gown or petticoat called lahenga of chintz or silk falling to the ankle and gathered in plaits round the waist, the upper part of the body being dressed in a scarf or odni two and a half to four yards long. Except Bohora women, who put on a large silk or chintz cloak that shrouds the whole face and figure, they have no special out-door dress, but go out wrapt in a white cotton sheet with the face uncovered. Many women of the four general classes, perhaps thirty or forty per cent of the whole, keep the zanána or seclusion rules; the rest appear in public in the same dress which they wear in-doors. Except on festive or ceremonial occasions almost all dress in cotton, save a few Mehman and Bohora women who always wear silk trousers or petticoats and scarves. The festive or ceremonial dress consists of one or two sets of silk or half-silk half-cotton, or embroidered robes and bodices, which

are given by the husband at marriage and generally last during the whole of the woman's life. A rich woman's ceremonial dress is worth £10 to £30 (Rs. 100-300), and a middle class or poor woman's £5 to £8 (Rs. 50-80). The yearly cost of dress to a rich woman is £1 to £1 10s. (Rs. 10-15), and to a middle class or poor woman 10s. to £1 (Rs. 5-10). Except in better class families for a year or two after marriage when they embroidered cloth slippers, Musalman women never wear shoes The Musalmán men seldom wear ornaments. The chief exceptions are some of the lower classes such as Kasábs butchers, Bágbáns fruiterers and Tambolis betel leaf sellers, who, when they can afford it, are fond of wearing a large gold ring in the right ear and a silver chain or toda fifty to a hundred tolás in weight on the right foot. Almost all Musalman women begin married life with a good store of ornaments. Their parents give them at least one nose ring, a set of gold carrings and silver finger rings, and their husbands invest in ornaments for the bride as much money as the dowry which is generally £12 14s. (Rs.127). At least among the poorer classes a woman seldom keeps her full stock of jewels. Most of them generally disappear by degrees in meeting special expenses and in helping the family through times of scarcity of food or of employment. Roughly a rich woman's ornaments vary in value from £30 to £100 (Rs. 300-1000), and a middle class or poor woman's from £2 to £20 (Rs. 20-200).

Among Musalmans some are Jagirdars or land proprietors and some are traders, and a good many are craftsmen. The bulk are soldiers, constables, messengers, and labourers. In villages the greater number are husbandmen and the rest are craftsmen. Among the regular classes, especially among town traders, soldiers, constables, and messengers, the women add nothing to the family income. many of the special communities and among husbandmen, weavers, and some other craftsmen and petty shopkeepers, the women's carnings are little less than the men's carning. Except traders, weavers, and some other classes of craftsmen, the bulk of the townsmen are idle and fond of drink and good living. The Pendhárás and Kakars are generally hot-tempered and dishonest, but the rest of the townsmen are mild, hospitable, and honest. The villagers especially the husbandmen are hardworking and thrifty. A few proprietors, the traders, and some weavers and husbandmen are prosperous, but as a class the Musalmans are badly off. suffered severely in the 1876-77 famine not only from the very high prices of produce, but because the demand for the articles they supplied ceased. Many families had to sell the bulk of their property and others incurred debt which they have not yet been able to pay. A few Dharwar, Hubli, and Savanur Musalman houses, chiefly belonging to proprietors traders and weavers, have stone and cement walls one or two storeys high and with tiled roofs surrounding a court-yard. Some of these houses, especially those belonging to Bohorás, Mehmans, and a few landlords, have several rooms furnished in European style, and have a good store of Chinaware and of brass and copper vessels. The bulk of the town Musalman houses are one storey high and have tiled roofs. Many of them have a front or back enclosure surrounded by a stone wall four or

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five feet high. Some of the better class houses have walls of estone and cement and a framework of good timber. Bate most the walls are of rough stone and clay smeared with a of cowdung, and timber is scantily used except for the roots. most cases the furniture is scanty. Tables chairs and European articles are found only in some of the rich houses Dharwar and Savanur. In most houses the furniture includes at a few low stools, a cot or two, some quilts or blankets, mats, and cooking and drinking vessels of copper and brass which are may admired as house ornaments. A town house of the better the costs £200 to £500 (Rs. 2000 - 5000) to build, and 10s to 18. (Rs. 5-8) a month to rent; a house of the middle class costs flip £30 (Rs. 100-300) to build, and 1s. to 3s. (Rs. 1-11) a month to rec Barbers, washermen, watermen, and sweepers work for several family and are paid by the year. Each of the families, for their share of is services, pays a waterman 10s. to 16s. (Rs. 5-8), a barber 4s. to 5. (Rs. 2-4), a washerman 10s. to C1 (Rs. 5-10), and a sweeper 2s.to3. (Rs. 1-4). Besides their cash wages these servant classes receive from their employers occasional gifts of old clothes and grain, and is on religious festivals, and on marriage and other ceremonics. Ton Musalmans except a few landlords seldom keep house servers; and few houses are neat or clean except those of Bohorás, Mehman, and some landlords. Village houses differ little from the poor class of town houses. They have generally three or four room with a court-yard either behind or in front, in which, or in the front room which is always the biggest, are tied bullocks, cows, and buffaloes. The middle room or rooms are for sleeping, and the back room for cooking. These houses have little furniture, a few mats, a cot or two with quilts and country blankets, a few brass and copper vessels, and a large supply of earthenware dishes. A village house costs £5 to £20 (Rs. 50 - 200) to build. Houses are almost never let on rent. The furniture in a well-to-do husbandman's house varies in value from £5 to £10 (Rs. 50-100) Like Hindus many of the lower craftsmen and husbandmen are ford of brass vessels, but most Musalmans use copper. In every-day cooking, to save the copper vessels, women generally use earthenware dishes, as, during the 1876-77 famine, most families were forced to pawn or to sell their metal vessels. Their religion binds almost all branches of Musalmans into one community. They worship at the same mosques, keep the same helidays, perform the same ceremonies, and respect and employ the same kázi. The only exceptions are the Lad Kasabs or mutton butchers, the Bagbans or fruiterers, the Pinjaras or cotton cleaners, the Pendharas or labourers and servants, and the Dhobis or washermen who have such strong Hindu leanings that they do not associate with other Musalmans, almost never go to mosque, eschew beef, keep Hindu holidays, and openly worship and offer vows to Hindu gods. Of the regular Musalmans about thirty per cent teach their children to read the Kurán, all of them are careful to circumcise their boys, to perform the bismillah that is in Allah's name or initiation, and to have their marriage and funeral ceremonies conducted by the kázi or his deputy the mulla. Though as a rule they do not attend the mosque for daily prayers,

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.most all are careful to be present at the special services on the amzún and Bakar Id festivals, and are careful to give alms and ly the Kázi his dues. Their religious officers are the kázi or judge bw the registrar, the khatib or preacher, the mulla or priest, and ne maulvi or law doctor. In former times the kázi was civil and iminal judge in addition to his duties as marriage registrar: ow he is a registrar of marriages. The office is always hereditary. he khatib or preacher stands next to the kazi. This office is ither hereditary or elective. The khatib's sole duty is to lead the lamzun and Bakar Id services either in the mosque or in the raying place or idgah, of which most large towns have one built utside the city walls. The Dhárwár and Sávanur khatibs hold lands tranted by Bijapur kings and Moghal emperors. They also get presents of clothes and shawls worth £1 to £3 (Rs. 10-30) for eading klutbás or sermons. The mulla or priest who is generally the váib or deputy kázi is generally chosen by the kázi from a poor and sometimes from a strange family, and appointed to certain villages. His duties are to keep the marriage register, and to kill goats sheep and fowls for the village Musalmans and Hindus. In choosing a mulla the kázi generally looks to his honesty and trustiness, rather than to his learning or ability. Some mullás are so ignorant that they do not know even the correct form of Arabic words used in cutting an animal's throat. If the people complain the kázi asks the mulla to send him his knife during the He blesses the knife and anything it cuts for a year Bakar Id. is considered pure. Some villagers grant the mulla a small plot of land in addition to their dues in corn or cash. As their income does not exceed 8s. to 10s. (Rs. 4-5) a month, and as Dhárwár and Belgaum Musalmáns are extremely lax in the matter of liquordrinking, some mullús serve in liquor shops even in their own village. Maulvis or law doctors, of whom there are very few, hold a high position in the Musalman community, sometimes ranking above the kázi. They earn their living by teaching Musalman boys, and by giving their opinion or fatwáh on points of Musalman law for which they are paid 2s. to 5s. (Rs. 1-21). In the absence of the preacher or khatib the maulvi sometimes acts for him and receives his fees. He also, if he is asked, preaches on receiving 4s. to 10s. (Rs. 2-5). Though learned and hardworking maulvis are generally badly off. They lead frugal and religious lives. Pirzádás or the sons of saints as spiritual guides hold a high position in the They claim descent from saints who in Musalmán community. olden times came from Arabia as missionaries. Most of these old saints worked and many still work miracles and answer pravers. Their descendants share in the reverence which is paid to their ancestors. Many of the lower classes of Musalmans in the belief

¹ To make a lawful animal pure or hald! the sacrificer should give the animal water to drink and pluck some hair, or if it is a bird some feathers, out of its throat. He should take a sharp knife, pass it a across the animal's throat, saying, I kill by the truth, pass it a second time, saying, that Alláh is great, and pass it a third time, saying, there is no God but Alláh. The knife should be sharp enough to cut the throat clean; care must be taken that it is not sharp enough to cut off the head.

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that it will cleanse them from their sins become disciples or murids of these pirzádás or saints' sons. When a man becomes his disciple the saint's son generally gives him a diploma containing the pedigree of his family from the original saint downwards. This diploma is sometimes laid in the disciple's coffin in the belief that the names of the saints save the dead from the torturings of the grave angels Munkir and Nakir. When a man adopts a nirzáda as his teacher he has to pay the teacher a fee varying from 4s. to £1 (Rs. 2-10) according to the disciple's means, and to give a banquet to at least twenty of the teacher's friends and relations at a cost of 10s. to £1 (Rs. 5-10). Rich disciples sometimes give a suit of clothes at a cost of £2 to £4 (Rs. 20-40). Every year or once every two or three years the pirs or spiritual guides make a journey to collect their dues from the murids or disciples. When a teacher comes to his village the disciple has to make him a gift or nazaránah varying from 2s. to 10s. (Rs.1-5). He is also feasted so long as he remains at the disciple's village. Though proud of their position and marrying as much as possible among themselves, their fondness for pleasure and good living have reduced many saints' sons' families to comparative poverty. Still, in obedience to the saying that his high birth places a Syed's actions above criticism, Musalmáns generally treat the pirzádás or saints' sons with great respect.

Like the Musalmáns of the Deccan and other parts of the Bombay-Karnátak, Dhárwár Musalmáns, though they keep the Bakar Id feasts and fast from sunrise to sunset during the thirty days of Ramzán, hold the Muharram as their chief holy season. For ten days they worship and offer vows at the biers called Hassan's and Hussain's táziás or tábuts, and the holy hands or panjáhs with the same feelings as a Hindu worships his gods. All Hindus except Brahmans join Musalmans in this worship of Hassan's shrine. During the ten Muharram days Lingáyats, Páncháls, and most landholding and craft-practising Hindus, who generally hold aloof from them, eat Musalman food, offer yows to the shrines, become fakirs or Musalmán begging ministrants of the shrines, dress or paint themselves as tigers, monkeys and bears, and disguise themselves as women and dance or perform in front of the shrine. As the Hindus share in the Muharram bier worship, so many Musalmans especially the women of the lower classes share in Hindu festivals and worship the Hindu goddesses Yellamma and Satyái. The goddess Satvái or Mother Sixth, who sends or who keeps away child diseases, is worshipped by some Musalmán women on the sixth day after a birth at what is known as the chhati or the sixth day ceremony. On that night, in the place where the child was born, the ground is smeared with cowdung, upon which seven wheat flour lamps are lighted and several copper dishes of cooked vegetables and the heart and liver of a sheep or goat and several kinds of fruits are arranged. The child for a short time is laid on a mat to gaze at the lamp and the cooked dishes. Kinswomen and friends are called and spend the night in singing, and, in the early morning, the nurse takes away the dishes containing the cooked food which has been laid near the child for the night. Most of the women of the general classes have a sufficient reverence for the cow to make them abstain from the use

of beef. Many of the lower classes of men and women believe in witchcraft and ghosts.

In cases of sickness they generally apply to some Musalman or Hindu sorcerer, who tells them that they are either under the influence of an evil spirit or are suffering from some charm which an enemy is working against them and that if they fail to take speedy measures to overcome the spell, the effect will be fatal. The sick person if poor gives 4s. to 8s. (Rs.2-4) and if rich 10s. to £1 (Rs. 5-10) to pay for the sadka or offerings to be made to the spirits. Next day the exorcist comes to the house of the sick bringing the offerings, lemons, eggs, and a fowl or a goat, and some coconnuts rice and pulse. He arranges these on the floor of the house, and for half an hour repeats charms and burns incense. He then carries away the offerings and generally eats them. When this exorcising, which is often accompanied by some drug, is successful, the patient generally makes the sorcerer a present. Some Musalmans on undertaking a journey during sickness, or if they wish to get tidings of an absent friend, consult maulvis or other learned Musalmans. The maulvi takes the Kurán and finds an answer in the first verse he happens In almost no Musalman family is the day for a marriage or for a naming fixed without consulting a law doctor or maulri.

The pilgrimage to Mecca, which a pious Musalman is bound to make, is much neglected by Dharwar Musalmans, by the poor from want of money and by the rich from laziness. At the same time almost all are careful to attend the fairs held in the neighbourhood in honour of saints. The chief fairs which Dharwar Musalmans attend are those in honour of Khwaja Bando Nawaz at Gulburga, of Raje Bag-Sawar in Dharwar, and of Pir Shamsodin or Miran Shamna at Mira. These fairs last four or five days and are attended by upwards of ten thousand visitors, among whom there is almost always a large body of beggars.

Fakirs or religious beggars belong to two main classes, bisharás or law-followers and heshards or law-neglecters. The law-followers are also known as mukimsháhis or residents. They marry and live in one place on labour or on alms. The law-neglecters, who are also called suns, have no wives and no homes. Among both the law-followers and the law-neglecters are several orders or giros of which those commonest in Dharwar are the Banvas, Chistis Kadrias, and Rafáis. All of these belong to the order of law-followers, and own honsesand lands most of which were granted by the Bijapur kings or the Moghal emperors. These orders of religious beggars are recruited partly from the sons of beggars and partly from outside. may not make his own son his disciple or balka. He must get some member of the order to become his son's teacher or murshad. The begging orders are also recruited from children who have been the subject of a vow made by their parents either before their birth or during some sickness. Musalmans also who lose heart in the struggle of life or who fall into dissipated ways join one of the begging orders. When a child or a man is to be allowed to join one of the orders a member of the order becomes his spiritual guardian or murshad, and teaches him the list of the heads of the order which

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passes back to Ali the prophet's son-in-law from whom all begging brotherhoods spring. New members are generally received into an order when several Fakirs are met at some of the leading local Each begging brotherhood of law followers has three office bearers; the order-head or sargiro, the beadle or nakib who carries a staff of office, and the treasurer or bhandari. The head of the order appoints the treasurer and the beadle who pay £2 to £5 (Rs. 20-50) for the honour, the amount being spent on a dinner given to the members of the community. Besides in admitting new disciples or bálkás, the members of the different begging orders take advantage of the meeting of several Fakirs at local fairs to settle disputes that may have arisen among the members of a At the fair all the begging Musalmans who are present at the close of the day withdraw to some out of the way The members of each order of beggars sit by themselves each with its head or sargiro. After all are seated the attendant or nakib of the headman in whose order the dispute has arisen rises holding his staff of office and asks blessings on the order to which he belongs. The head or sargiro of each of the order sits on the state cushion called masnad or gadi and presides over the meeting. the other members sitting around them. The complainant states his view of the case and the defendant gives his view. accounts are generally interrupted by questions from the members of the different orders. There are few rules and there is generally much wrangling and disputing, the heads of the orders seldom doing much to guide the debate. When the wrangle has gone on for a time, they stop to drink, smoke hemp, and eat opium, which is prepared separately for each order by its treasurer or bhandari. The wrangling is seldom over by daylight and sometimes lasts three or four nights. When a member is found guilty he is punished by being excommunicated from the order to which he belongs, and thenceforward no Fakir either gives him a pipe to smoke or water to drink, or asks him to give a smoke or a drink until the offender pays a fine, and gives a dinner party to all who were present at the time of his conviction.

The nine communities which form the main body of Musalmans who intermarry and differ little in look, dress, or customs, include besides the four general divisions of Syeds, Shaikhs, Moghals, and Pathans, the five classes of Attars the perfumers, Bangarharas bracelet-sellers, Bedars servants, Kalaigars tinners, and Manyars or glass-makers.

Syeds.

Syeds, or Chosen, claim descent from Fatima and Ali, the daughter and son-in-law of the Prophet. Their forefathers are said to have come from North India and Arabia, and to have settled in the Deccan, chiefly under its early Musalman rulers. They speak Deccan Hindustani. The men are of middle height, well made, and fair or olive-skinned. They shave the head and wear the beard full. Townsmen dress in a turban or a headscarf of white or green cotton, a shirt, a waistcoat, a coat and a pair of loose trousers, and villagers in a turban, a waistcoat, and either tight trousers or a waistcoth. The women of the townsmen, who are generally of middle

height, delicate and fair, with full regular features, dress in the Hindu robe and bodice. They are neat and clean, do not appear in public, and add nothing to the family income. The wives of village Syeds dress like their town sisters only less neatly and cleanly. They are harderworking and thriftier, and some whose husbands are poor work in the fields and look after the cattle. The men take Syed or Mir before, or Shah that is king after their names, and the women take Bibi or lady before their's. In villages Syeds are husbandmen, and in towns the poor work as soldiers constables and messengers, and the rich are landlords and spiritual guides. The villagers are hardworking thrifty and sober, and the townsmen though mild hospitable and honest are lazy and fond of drink and pleasure. They suffered severely during the 1876-77 famine; many were forced to part with almost their whole property. They generally marry among themselves. But a poor Syed has no objection to marry his daughter to a rich Shaikh, and the men take wives from any of the classes who form the main body of Musal-In religion all are Sunnis of the Hanafi school, and are more or less strict in saying their prayers Except a few poor villagers all teach their boys to read the Kuran in Arabic, and to read and write Marathi and Kanarese. Of late many have begun to send their boys to English schools. None have yet risen to any high position through education.

Shaikhs, literally Elders, are found all over the district. The title Shaikh or elder belongs strictly to three branches of the Kuraish family, the Siddikis who claim descent from Abn Bakar Siddik, the Farrukis who claim descent from Omer Al Faruk, and the Abbasis who claim descent from Abbas one of the Prophet's uncles. word Shaikh being a general term of courtery has come to include many local converts and foreigners. Men who are included in this class add Shaikh or Muhammad to their names, and women Bibi to They speak Hindustani, and in look do not differ from Syeds. Except some of the youths the men shave the head, and all wear the beard either short or full. They dress in a Maratha turban or a headscarf, a coat, a shirt, and a waisteloth or tight trousers. The women dress in the Hindu robe and bodice. Except in poor families the women do not appear in public, and add nothing to the family income. Though hardworking and thrifty, the townsmen, most of whom are soldiers servants constables and messengers, are not well-to-do, and have not recovered from the loss they suffered during the 1876-77 famine. The villagers who are husbandmen, and more hardworking than the townspeople, had to part with most of their property during the famine. They marry either among themselves, or, if rich and respectable, among the Syeds or with any of the general classes of Musalmans. They are Sunnis of the Hanafi school. They are religious, many of them being careful to say their prayers and to teach their boys to read the Kuran. They send their boys to learn Marathi or Kanarese, and some have lately began to teach their children English. One or two have gained posts as English clerks.

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Syeds.

Shailhs.

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Musalmans.
Moghals.

Moghals are found in small numbers at Dharwar and some of the larger Musalman centres. They claim descent from the Moghals, who, during the seventeenth century, came with the Moghal conquerers of the Deccan (1686-1729). Their home speech is Deccan-Hindustani. The men are either tall or of middle height, with fair skins and regular features. They shave the head, wear the beard full, and dress in a headscarf, a shouldercloth, a long coat, a shirt, a waistcoat, and a pair of loose trousers! The women, like the men, are either tall or of middle height, delicate. and fair with full regular features. Village or poor townswomen dress in a Hindu robe and bodice, and if rich in the ordinary Musalmán petticoat two to five yards of chintz or silk, a scarf to cover the upper part of the body, and a bodice covering the back and fastened in a knot under the posom. Though neat and clean in their habits they neither add to the family income nor appear in public. The men add Mirza to their names and the women Bibi or lady. Town Moghals are servants and messengers and village Moghals are husbandmen. Though hardworking and thrifty they are not well to do. In religion they are Sunnia of the Haneli school, and are said to be religious and careful to say their prayers. They teach their boys to read the Kuraa in Arabic. They marry with any of the general classes. They send their boys to school to learn Maráthi or Kánarese. Some have lately begun to send their boys to English schools, and one of them is a clerk in the police superintendent's office.

Patháns.

Patha'ns, or Victors, claim an Afghan origin. The men add Khán or chief and the women Bibi or lady to their names. Their home speech is Deccan-Hindustavi. The men are either tall or of middle height, strong, and dark or olive-skinned. They shave the head, wear the beard full, and dress in a Maratha turban, a coat, a shirt, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women who are like the men in face, dress in the Hinda robe and bodice, but, except the old or poor, do not appear in public, nor add to the family income. They are neat clean and well-behaved. The townsmen are servants messengers and constables, and the villagers are landholders. Though hardworking and thrifty some of them are excessively fond of liquor, and are deep in debt. They suffered severely during the 1876-77 famine, many of them having had to sell even their houses. They marry with any of the general classes of Musalmans. In religion they are Sunnis of the Hanasi school, and some of them are said to be religious and careful to say their prayers. They teach their boys Marathi and Kanarese, and, in a few recent cases, English, but so far education has not raised any of them to a high position.

Of the five classes who belong to the general body of Musalmins:

Attars.

Atta'rs, or Perfumers, are local converts from the Hindu class of the same name. They are found in small numbers in different parts of the district. They speak Deccon-Hindustani among themselves and Marathi or Kanarese with others. The men are tall or of middle height and dark or olive-skinned. They shave the head,

wear the beard full, and dress in a Marátha turban or a headscarf. a tight jacket, and a pair of tight trousers or a waistcloth.' The women, who are like the men in face, wear the Hindu robe and bodice. They are neat and clean in their habits, do not add to the family income, and except the old do not appear in public. The men are neat, clean, hardworking, and thrifty, but, on account of the fallen state of their trade, are seldom well-to-do. During and after the 1876 famine many moved to other districts in search of work. They chiefly sell cosmetics, dentrifice, redpowder, incense, and hair-oil scented with rose and jessamin. During the Muharram they add to their stock cotton-thread garlands or schilis of many colours, which both Hindus and Musalmans wear during the last five days of the holy season. Their trade is dull and they do not make more than 1s. to 2s. (Re. \frac{1}{4}-1) a day at ordinary times, or 2s. to 10s. (Rs. 1-5) during the five Muharram days. Though nominally a distinct body, their customs do not differ from those of ordinary Musalmans. They have no headman other than the kázi. They marry either among themselves or with any of the regular Musalmans and obey and respect the kazi. They are Sunnis of the Hanasi school and are not particular in saying their prayers. They try to give their boys some schooling. Besides as perfumers some carn their living as servants and messengers.

Bedars found in one or two families as messengers at Dharwar are immigrants from Maisur. They are said to have been converted from the hill tribe of Baydarus or Bedars, by Haidar Ali Khan (1762-1782), from whom they have taken the title of Khan. Both Haidar and Tipu had great trust in their Baidar troops.1 They are believed to have come to Dharwar with General Wellesley's army in 1803. Among themselves they speak Hindustani and with Hindus Kanarese. The men are tall, strong, well made, and either black or brown-skinned. The men shave the head, wear the beard full, and dress in a turban or a head-carf, a coat, a shirt, a tight jacket, and a pair of tight trousers. The women, who are like the men in face, dress in a chintz potticoat two to four yards long, and cover the upper part of the body with a scarf and a bodice covering the back, and the ends tied in a knot under the bosom. They do not appear in public nor add to the family income, but are neat and clean in their habits. The men are messengers and constables, and, though hardworking and thrifty, are badly off. They do not form a separate community, and do not differ in their manners or customs from ordinary Musalmans, and marry among any of the ordinary Musalman communities. They are Sunnis of the Hanasi school, and are religious and careful to say their prayers. They send their children to school and teach them Marathi and Kanarese. None have risen to any high position.

Bangarha'ra's, or Bangle-sellers, a branch of Manyars, are like them descended from local Kasar converts, who are said to have embraced Islam during the time of Aurangzeb (1686-1707). Chapter III.
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Bangarhárás.

They are found in small numbers over almost the whole district. They do not differ from Manyars in look dress or speech. The women dress in the Hindu robe and bodice, appear in public, and help the men in their work. Both men and women are neat and tidy. They make wax bracelets and sell Chinese glass bangles which they buy from wholesale Váni dealers who bring them from Bombay. On a dozen bangles they make 14d. to 3d. (1-2 as.) and their average daily sales are about three dozen, leaving an average profit of 41d. to 9d. (3-6 as.). They sell both to Hindus and Musalmans. sometimes in shops sometimes as peddlers at fairs or from house to house. When the men are away the women generally sit in the shops and sell. In manners and customs they do not differ from ordinary Musalmans, and marry either among themselves or with regular Musalmans. They have no separate headman and in all matters obey the regular kázi. They are Sunnis of the Hanafi school, but are not religious or careful to say their prayers. They send their boys to school to learn Maráthi or Kánarese. know English, and none have risen to any high position.

Kaláigare,

Kala'igars, or Tinners, local converts of mixed Hindu classes, are found in small numbers throughout the district. They speak Hinduståni among themselves and Kanarese or Marathi with others. men are tall or of middle height and dark or olive-skinned. shave the head, wear the beard full, and dress in a white cotton Marátha turban, a shirt, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women who are of middle height, wheat or olive-skinned, and with full regular features dress in a Hindu robe and bodice. Except the old none appear in public or add to the family income. The men when at work are dirty, but as a class they are neat and clean. The men tin the copper and brass vessels which are used by Hindus, Musalmans, and Christians. charge 1s. to 2s. (Re. 1-1) for a dozen dishes according to size. Though hardworking thrifty and sober, they are poor, as after the 1876 famine, to save the cost of tinning, many even well-to-do families cooked in earthen vessels. They form a separate community settling social disputes by holding caste meetings under a head. man who is chosen from the most respectable families. With the approval of the majority of the castemen the headmen has power to fine any one who breaks their social rules. Their names and customs do not differ from those of ordinary Musalmans and they marry either among themselves or with regular Musalmans. They respect and obey the kázi and employ him to conduct their marriage and funeral ceremonies. They are Sunnis of the Hanafi school, and are seldom religious or careful to say their prayers. They try to give their boys some schooling. Besides by tinning some Kalaigars earn their living as servants and messengers. None have risen to any high position.

Manyars.

Manya'rs, or Glass Bangle-makers, are the descendants of local Hindu Kasars, who are said to have been converted during the reign of Aurangzib. They are found in small numbers in some of the larger towns. Among themselves they speak Deccan-Hindustani and correct Kanarese or Marathi with others. The men

are of middle height and dark or brown-skinned. They shave the head, wear the beard full, and dress in a Maratha turban, a shirt, a tight jacket, and a waistcloth. The women who are like the men in face dress in the Hindu robe and bodice, appear in public, and help the men in their work. Both men and women are neat and clean in their ways. Chinese competition has forced the Manyars to give up their old craft of glass and wax bangle-making. They have become petty shopkeepers and dealers in hardware and miscellane-ous articles. They sell iron pots and dishes, which they buy from wandering Ghisadis and soll at a high profit. They buy cotton and coir ropes from Kanjars whom they pay in grain or in cash. Besides ironware they sell mirrors, sewing thread, pins, locks, and English match boxes. Some have shops and others go as peddlers with a pack to weekly markets and through neighbouring villages. They are hardworking, thrifty, and sober, and some are well-to-do and able to save. Though they form a branch of the Bangarharas or bangle-sellers, they are a distinct class, settling their disputes among themselves by holding caste meetings with a headman of their own, chosen from the richest families, and empowered to fine any one who breaks their rules. They marry either among themselves or with any of the ordinary classes of Musalmans. They are Sunnis of the Hanafi school but are seldom religious or careful to say their prayers. They are careful to give some education to their boys, but none have risen to any high position.

Of the twenty-five separate communities the seven of outside origin include five of traders Bohorás, Labbeys, Mehmans, Mukeris, and Saudágars, one of craftsmen Gáo-Kasábs or beef butchers, and one of servants or labourers Kákars or grass-cutters.

Bohora's, probably from the Gujarat voloravu to trade, immigrants from Gujarát, are found in small numbers in Dhárwár city. They seem to be of part Hindu part Arab and Persian origin. In religion they belong to the Ismaili branch of Shias and follow the Mullah Sahib, their high priest who lives at Surat. They are believed to have come to Dhárwár from Bombay and the Nizám's country about sixty years ago. Among themselves they speak Gujaráti, and with others Marathi or Hindustani. They are tall or of middle height, delicate, and light brown in colour. The mon shave the head and wear the beard full. They dress in-doors in a skull cap and out of doors in a tightly wound white turban, a long coat falling to the knee, a shirt, a tight-fitting jacket, and a pair of loose trousers. Their women, who like the men are either tall or of middle size, are delicate, either wheat or brown in colour, and regular featured. They do not appear in public. They wear a headscarf or odna, a backless bodice or angia, and a gown or petticent called lakenga, of three or four yards of chintz or silk. On going out they add a long cloak called burkha which covers the whole body from head to foot, leaving a gauze opening for the eyes. They do not add to the family income, but are clean, quiet, and thrifty. Bohoras deal in English hardware, in piecegoods, and in groceries. Some have agents in Bombay, Poona, and Belgaum, who supply them with all the articles in which they deal. They sell to Europeans, Musalmans, and Hindus Chapter III.
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and are hardworking, thrifty, and sober. As a class they are well-to-do and have a good name for fair dealing. They form a separate community, marry only among themselves, and have their disputes settled by the deputy of the Surat Mullah Sahib whose head-quarters are at Haidarabad. They are Ismáili Shiás of the Daudi sect. They are careful to say their prayers either in their own houses or gardens or at the house of the richest man among them who sets apart one of his rooms as a chapel. They have no mosques of their own and do not attend the Sunni mosques. They treat the deputy Mullah with much respect, and are regular in paying their contributions to the Mullah Sahib at Surat. The chief points of difference between their beliefs and practices and those of regular Musalmans are that they pay special devotion to Ali and his sons Hassan and Hussain, and to their high priest the Mullah Sabib of Surat; that they attach special importance to circumcision; that they reject the three Kaliphs, Abu Bakar Sidik, Umar, and Usman; that at death a prayer for pity on the soul and body of the dead is laid in the dead man's hand; and that they on no account either eat or drink from Hindus. They teach their children to read the Kurán and enough Maráthi or Gujaráti to keep accounts. None learn English. They follow no calling but trade, and on the whole are a rising class.

Labbeys.

Labbeys, or immigrants from the Malabár coast, though not permanent settlers are found in small numbers in some of the large towns. They are descended from the Persian¹ Arab² and Abyssinian settlers in whose hands the foreign trade of Western India was centered for several centuries before the establishment of Portuguese supremacy (A.D. 1510). Among themselves they speak Arvi or Malayalam and Hindustani with others. The men are tall strong and well made, and dark olive-skinned. They shave the head, wear long thin beards, and dress in a skull cap or loose chintz headscarf, a long shirt falling almost to the knees, a coat or a waistcoat, and a chintz waistcloth or lungi falling to the ankle. Their habits are neat and clean. They do not bring their women to Dhárwár, and seldom stay more than a year in the district. They gather a stock of skins and leather

strong resemblance to the natives of Abyssinia. Compare

I. 353.

¹ Of the first Arab settlement the Labbey books give the following account: In A.D. 816 (H. 200) Malik bin Divan an Arab soldier of fortune with a large number of followers started from Arabia to visit Adam's tomb in Ceylon. His ships were wrecked on the Malabar coast and he was forced to land. Cheraman Perumai the chief of Malabar took a liking to the Arabs and kept them at his court. Malik told him of the Prophet Muhammad and how he had halved the moon. The king asked when the moon was halved, consulted the Brahmán astrologers, and, finding that Malik's date was correct, became a Musalmán, divided his kingdom among his relations, and started for Mecca. He died on his way back. Ever after Arabs were treated with honour on the Malabár coast and settled in great numbers. See Buchanan's Mysore, H. 51-70 and Jámiul Tavárik.

²According to Wilks' History of Southern India (I. 212) the first Persian settlers came in the early part of the eighth century as refugees from the tyranny of Hajjaj bin Yusuf, governor of Irak. Some landed on the Konkan and were called Navaits; others landed east of Cape Comorin and were called Labbeys. The Labbeys claim origin with the Navaits and attribute their black complexion to antive women. The Navaits affirm that the Labbeys are the domestic slaves. Col. Wilks was of opinion that in face and

from the local butchers and send them preserved in salt to Bombay or Madras tanneries. They are hardworking, thrifty, and generally well-to-do. They form a separate community and nover marry any local Musalmán women. They are Sunnis of the Shafai school and are said to be religious and careful to say their prayers. On the whole they are a rising class.

Mehmans, properly Momins or Believers, immigrants from Cutch and Gujarat are found in small numbers in Dharwar city. They are the descendants of Gujarát and Cutch Hindu Káchiás and Lohánás who were converted to Islám by Pir Yusaf-ud-din an Arab missionary in 1422. They are said to have come with the British troops from Poona to Dharwar soon after the beginning of British rule in 1818. They speak Cutchi among themselves and Hindustani with others. The men are strong well-made and fair. They shave the head, wear the beard full and long, and dress in a fine cotton or silk headscarf, a coat, a long shirt falling to the knee, a waistcoat, and loose trousers. The women are tall or of middle height with fair skins, arched eyebrows, large eyes, straight nose, and full rounded limbs. They dress in a long shirt falling almost to the ankle, a headscarf, and a pair of loose trousers rather tight at the ankles. Except when old they wear a backless bodice with short and tight sleeves. The whole of their dress is almost always of silk. They are neat and clean in their dress, are careful not to appear in public, and except by skilful housekeeping add nothing to the family income. The men deal in English hardware and piecegoods. They are hardworking thrifty sober and well-to-do, and have a good name for fair dealing. They marry among themselves only and form a separate community, but without any special organization and with no separate headman. They respect the regular kázi and call him to conduct their marriage and funeral ceremonies. Except that daughters have no share in ancestral property, their rules and customs do not differ from those of ordinary Musalmans. They are Sunnis of the Hanasi school and are said to be religious and careful to say their prayers. They send their boys to school to learn Marathi, and they teach them Gujarati at home but none know English. They take to no calling but trade, and on the whole are a rising class.

Mukeris, or Deniers, are found about 200 strong in Dharwar city. They are said to be the descendants of Lamani or Banjari Hindus who were converted to Islam by Tipu of Maisur. They are believed to have come from Maisur in 1803 as suttlers to General Wellesley's force. Among themselves they speak Hindustani, and Marathi or Kanarese with others. The men are tall or of middle height, strong, and dark or olive-skinned. They shave the head and wear the beard full. They dress in a turban or a headscarf, a coat,

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Mehmans.

Mukeris.

¹ Of the origin of the name Mukeri this story is told. A member of Tipu's court laid a complaint before the king that a man of rice brought from a Lamani held thirty instead of forty sers. The rice was weighed before the Sultan and was found to be short. The Lamani was called and weighing the grain showed that it was found to be short in the Lamani was called and weighing the grain showed that it was found to be short. The Lamani was called and afterwards confessed. That people might be on their guard against them. Tipu ordered that Lamani Musalmans should henceforward be called Mukeris or deniers.

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Mulcris.

a shirt, a tight-fitting jacket, and tight trouvers. The women, who are like the men in face, dress in the Hindu robe and bodice, and, except the old, neither appear in public nor add to the family income. Both men and women are neat and clean in their ways. Mukoris are grain-cellers and grocers. Though hardworking they are fond of liquor, and are thrilly and well-to-do. Their name is a bye-word for cheating. They marry among themselves only, form a separate community, and rettle their disputes at class meetings headed by n chaudhari or headman who belongs to one of the richest families. With the approval of the majority of the castemen the headman can fine any one who breaks their rules. They respect the kazi and ask him to conduct their marriage and funeral rervices. They are Sunnis of the Hannii school, but are not religious or careful to say their prayers. They send their boys to rebool, and teach them Marathi and Kanarese but not English. They follow no pursuit except trade.

Sauddyars.

Sauda'gars, or Honourable Traders, are said to represent the ancient Arab and Persian merchants who traded with Western India. (800-1500). They are immigrants from Maisur and Madras, and are believed to have come to Dharwar since the beginning of British rule. They speak Hindusthui among themselves and Marathi or Kanarese with others. Their appearance seems to show a strong strain of foreign blood. The mun are generally tall and well made, wheat or brown coloured, with large ever and straight noce. They shave the head, wear full beards, and dress in a silk or fine cotten headeauf, a long white cotten cost, a shirt falling to the knee, a pair of losso trousers, or in-doors a chinta waisteloth or lungi. The women are, like the men, tall, delicate, and fur, with handsome features. They dress in a gown or petticoat of four or five yards of chintz gathered in plaits round the waist and falling to the aukles, a tight bodice with short tight sleeves covering the back and the ends fastened in a knot under the hosom, and a healscarf of two to four yards of chints. They are very careful not to appear in public and are excellent housewives. Both men and women are neat, clean, mild, hospitable, and rober. Sandágara deal in piecogoods and were formerly well-to-do. They suffered severely during the 1876-77 famine. Though hardworking and thrifty some of them were forced to give up trade and take to husbandry or service. They are Sannis of the Hanafi school and are said to be very religious and careful to say their prayers. They teach their children to read the Kurán in Arabic and tend them to school to learn Marathi or Kanarese. They marry among themselves only and form a separate community but have no special organization and no headman, respect the regular kazi and in their manners and customs do not differ from ordinary Musalmans. None have risen to any high position, and on the whole they are falling in number and condition.

Kalars.

Kn'kars, or immigrants from Afghanistán, are found in numbers in Dhárwár and Hubli. Their forefathers are have come from Afghanistán with Ahmadsháh Duráni about 1717. After Ahmadsháh's defeat in North they remained in India leading the life of outlaws, and

ling through the North-West Provinces, Gujarát, and other districts found their way to Haidar Ali of Maisur. They are said to have come to Dhárwar in 1803 as camp followers to General Wellesley's army. Their home-speech is a mixture of rough Hindustani, Malvi, Gujaráti, and Maráthi. The men are tall strong well-made and dark. They shave the head, wear beards, and dress in a Hindu turban, a shirt, a tight-fitting jacket, and a waistcloth. Their women, who are like the men in face, wear the Hindu robe and bodice, appear in public, and add to the family income. Both men and women are dirty and untidy in their habits. The men are servants, messengers, and horsekeepers earning 10s. to 20s. (Rs. 5-10) a month, and the women make a living by selling headloads of grass and fuel. Though hardworking they are generally fond of drink and are badly off. They marry among themselves only and have a well organized community settling their disputes at class meetings under a headman or jamadar who belongs to one of the richest families, and, with the concurrence of the majority, has power to fine any one breaking their class rules. The fine fund is spent in caste dinner and drinking parties. They respect the kázi, and in manners and customs differ little from the regular Musalmans. They are Sunnis of the Hanafi school and are seldom religious or careful to say their prayers. They do not send their boys to school, and none of them has risen to any high position.

Ga'o Kasa'bs, or Beef Butchers, found in small numbers in Dharwar city are said to have come to Dharwar with General Wellesley's army in 1803. They are found in most military cantonments in the Decean and are often attached to certain regiments and move with them from one place to another. Some claim descent from Afghans and others from Arabs, but the face and figure of many scein to point to a part Abyssinian origin. Their home speech is a rough Hindustani. The men are tall, strong, well-made, and dark. They either shave the head or wear the hair falling below the car and a full beard. They dress in a turban or headscarf, a shirt, a jacket, and a pair of tight trousers. The women, who are like the men in face, dress in the Hindu robe and bodice, appear in public, help the men in selling beef, and, though hardworking and thrifty, are proverbially shameless and quarrelsome. Both men and women are dirty and slovenly in their dress and habits. They sell both cow and buffalo beef, but buffalo beef is disliked and is seldom used. Their customers are Christians, Musalmans, and low caste Hindus. The chief consumers are low caste Hindus as few Muselmans cat beef. First class beef is sold to Europeans at 3d. the pound (8 pounds the rupee) and second class beef to Musalmans and others at 11d. the pound (16 pounds the rupee). Though hardworking and thrifty they are excessively fond of drink, and are badly off. They marry among themselves only and form a separate community settling social disputes at class meetings under a headman or pdtil, who, if the majority of the caste approve, has power to fine any one who breaks their rules. Their manners and customs do not differ from those of ordinary Musalmans; and they call the kazi to conduct their marriage and

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funeral ceremonies. They are Sunnis of the Hanafi school and are not religious or careful to say their prayers. They give their boys no schooling and take to no new pursuits.

Of the eighteen separate communities mainly of local Hindu descent, two, Bágbáns fruiterers and Támbolis betel leaf sellers are traders; soven, Gaundis masons, Lád Kasábs butchers, Momins weavers, Patvogars tassel makers, Pinjárás cotton cleaners, Rangrez dyers, and Saikalgars armourers are craftsmen; seven, Bhatyárás cooks, Dhobis washermen, Hajáms barbers, Halálkhors scavengers, Kanjars poulterers, Pakhális watermen, and Pendhárás grass cutters are servants and labourers; and two, Kasbans dancing girls, and Táschis drummers are players and musiciaus.

Bagbans.

Ba'gba'ns or Ba'gva'ns, Gardeners and Fruiterers, represent local Kunbis or Malis who are said to have been converted during the time of Aurangzib (A.D. 1686-1707). They are found in large numbers over almost the whole district. Among themselves they speak Decean Hindustani and with others Marathi or Kanarese. They are tall or of middle height, well-made, and dark or oliveskinned. The men shave the head, wear beards either short or full, and dress almost like Hindus, in a Marátha turban, a tightfitting jacket, and a waistcloth. The women, who like the men are either tall or middle sized, wheat or olive skinned, and with regular features, wear the Hindu robe and bodice, appear in public, and help the men by selling fruit and vegetables. Both men and women are rather dirty and untidy. The men go among garden villages buying potatoes, brinjals, onions, and green vegetables, and plantains, guavas, and pomegranates. They sell at a shop and also from door to door. Though hardworking, thrifty and sober, they are generally poor and in dobt. They do not carn more than 1s. (8 as.) a day. They marry among themselves only, and are a separate body with a well organized community and a headman or chaudhari chosen from the richest families. With the approval of majority of the members the headman has power to fine any person who breaks their rules. Unlike regular Musalmáns they privately worship and pay vows to Hindu gods and keep Hindu festivals. They respect the kázi and ask him to conduct their marriage and funeral services. Though in name Sunnis of the Hanasi school they are seldom religious or careful to say their prayers. They do not send" their children to school or take to new pursuits.

Támbolis.

Ta'mbolis, or Betel-leaf Sellers, descendants of local Kunbi converts are found in considerable numbers in almost all towns and villages. Their forefathers are said to have been converted during the reign of Aurangzib. They speak Decean Hindustáni among themselves and Maráthi or Kánareso with others. The men are tall or of middle height and brown skinned. They shave the head, wear the beard full or short, and dress in a large Marátha turban, a shirt, a tight-fitting jacket, and a waistcloth. The women who are of middle height, fair, and with regular features, dress in the Hindu robe and bodice, appear in public, and help the men in their work. Both men and women are neat and clean in their habits. They buy betel leaf from the growers either in neighbouring villages or from outsiders. A few rich wholesale dealers keep two

or three bullocks to bring their supplies from a distance, and distribute them among poor retail sollers. They have shops which in their absence are under the charge of their wives. They are hardworking, thrifty and soher. A few are well-to-do and able to save; but the bulk are poor. Their work is constant but they do not earn more than 6d. to 8d. (4-6 as.) a day. They marry among themselves only, and have a well organized community settling social disputes at class meetings under a headman or chaudhari chosen from the richest families, who, with the approval of the majority, has power to fine any one breaking the rules. They differ from ordinary Musalmáns in privately worshipping and paying vows to Hindu gods, keeping Hindu festivals, and eschewing beef. They are Sunnis of the Hanafi school in name, but, except a few, they are not religious or careful to say their prayers. They respect the kázi and ask him to conduct their marriage and funeral services. A few try to give their boys some schooling, but none have risen to any high position.

Gaundis, or Bricklayers, found in small numbers over almost the whole district, are said to represent local Hindu Gaundis who were converted during the reign of Aurangzib. They speak Deccau Hindustani among themselves and Marathi or Kanarese with others. The men are tall or of middle height, thin, and dark. They shave the head, wear short or full beards, and dress in a Marátha turban. a tight-fitting jacket, and a waistcloth. The women, who are like the men in face, dress in the Hindu robe and bodice, appear in public, and add nothing to the family income. Neither men nor women are neat or tidy in their habits. They carn their living as bricklayers. They suffered greatly during the 1876-77 famine as all house-building was at a stand. Many left the district. Of late railways and other public works have given them constant and well paid employment. They marry among themselves only and form a separate community, but have no organized union and no headman. They respect the kúzi. They differ from regular Musalmáns chiefly by offering vows to Hindu gods, keeping Hindu festivals, and eschewing beef. They are Sunnis of the Hanafi school in name, but are not religious or careful to say their prayers. They do not send their boys to school. In the time of depression that followed the 1876-77 famine some took employment as servants and messengers.

La'd Kasa'bs, or Mutton Butchers, are found in considerable numbers in almost all the larger towns. They are said to represent Hindu Lad Kasa'bs who were converted by Tipu of Maisur (1781-1799) Among themselves they speak Decean Hindustani and with others Marathi or Kanarese. The men are tall or of middle height, and dark or olive skinned. They shave the head and either shave the beard or wear it short, and dress in a Hindu turban, a tight-fitting jacket, and a waistcloth. Some wear a large gold carring in the right ear. The women, who are tall or of middle height and fair with regular features, dress in the Hindu robe and bodice, appear in public, and help the men by selling mutton. In their persons and dress both men and women are dirty and untidy. They live as

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mutton butchers and kill both sheep and goats. They buy the animals at £2 to £3 (Rs. 20-30) the dozen chiefly from Dhangars. They do not keep the animals for more than a week, killing them in the yards behind their houses, and rell the mutton at 3d to 41d. (2-8 as.) the pound. They are hardworking, thrifty, and sober, and some are well-to-do and able to rive. They marry among themselves only, and are a reparate community with a well organized society under an elective headman called pitil. Social disputes are settled according to the opinion of the unijority of the men, and, with their approval, the headman fines any member who breaks the rules, They have a strong Hindu feeling and exchew beef, worship and offer yows to Hindu gods, and keep Hindu festivals. Except that they employ the regular kázi to conduct their marriage and functal services, they are Musalmans in little more than name. None of them know the Kurán or ever attend, the morque, and they do not eat with other Musalmans. They do not send their boys to school or take to any calling except mutton selling.

Memine.

Momins, or Weavers, are found in large numbers almost all over the district, especially in Hubbi where they are more than three thousand. They are said to represent Hindu Koshtiz or Saliz who were converted by Hasham Pir Gujardti, the religious teacher of the Bijapur king Ibrahim Adil Shuh II, about the close of the sixteenth century. They still look upon the saint with special reverence and pay great respect to his descendants. The men are tall or of middle height and brown rkinned. They shave the head wear the beard full, and dress in a Hindu turban, a coat, a whict, a waistenat, and either tight trousers or a naisteleth. The women who are of middle height, delicate, fair, and with regular features, wear the Hindu robe and bedice, appear in public, and are such useful workers that the men generally marry more than one wife Neither men nor women are next or tidy in their habits. They weave cotton, buying English or Bombay mill-yarn from Hinda Vani dealers and working it into robes, a chintz for bodices called khans, a striped cloth called suri used in trousers, and silk-bordered warsteloths. Some of the rich and well-to-do weave their own yarn and sell the cloth in the market, or to wholesale merchants by whom it is sent to Bombay and Poona. The bulk of them are labourers, and work for oil to 1s, (4-8 as.) a day. hardworking and thrifty, most of them even the women are fond of fermented date-palm juice and except a few who are well-to-do and able to save, the bulk are poorly clad and hadly off. They marry among themselves only and form a well organized society. settling their social disputes at class meetings under a head or chaudhari chosen from the richest families, who, with the approval. of the majority of the men, has power to fine any one breaking their rules. They respect the kazi and do not differ in manners and customs from ordinary Musalmans. They are Sunnis of the Hannii school, and come are religious and careful to say their They do not give their boys any schooling, Momins are servants and messengers.

Patregars.

Patvogars, or Tassel twisters, are found in small numbers in almost all of the larger towns. They represent Hindur of different

classes who are said to have been converted by Aurangzib. The men are tall or of middle height, strong, and dark or olive-skinned. They shave the head, wear the heard full, and dress in a Hindu turban, a shirt, a tight jacket, and a waistcloth. The women. who are either tall or middle-sized thin and brown, wear the Hindu robe and bodice, and appear in public, but add nothing to the family income. As a rule both men and women are clean in their habits and tidy in their dress. They live by twisting silk tassels. They buy silk from Hindu merchants in small quantities and make the silk cords or chains with tassels called kardotas, which are worn round the waist both by Hindus and Musalmans. They also sell falso hair and deck gold and pearl ornaments with silk. They earn about 1s. (S as.) a day. They have shops and also go about the town where they live and through the neighbouring villages in search of work. They are hardworking thrifty and sober. and some of them are well-to-do and save. They marry among themselves only and form a separate community, but have no social organization and no headman except the regular kazi. They differ from ordinary Musalmans in offering vows to Hindu gods, keeping Hindu festivals, and eschewing beef. They are Sunnis of the Hanasi school but are not religious or careful to say their prayers. They do not send their boys to school or take to any fresh employment.

Pinja'ra's, or Cotton Cleaners and Carders, are found in small numbers in some of the larger towns. They are said to represent Hindu Pinjárás who were converted by Aurangzib. They speak Decean-Hindustani among themselves and Marathi or Kanaroso with others. The men are of middle height and dark. shave the head, wear the beard either short or full, and dress in a Hindu turban, a tight-fitting jacket, and a waistcloth. The women are like the men in face. They dress in the Hindu robe and bodice, appear in public, and help their husbands in carding cotton. Neither men nor women are clean or tidy in their habits. They card cotton, cleaning it to stuff mattresses, quilts, and pillows, and are paid 6d, to 2r. (Re. 1 - 1) a day, but are often idle for days at a time. The women work at home and the men move about in search The decline of hand-spinning rained their craft Though hardworking thrifty and sober, from want of work they are always poorly clad and badly off. They marry among themselves only and form a separate and well organized society. They settle social disputes by class meetings under a headman or a patil, who, with the consent of the majority of the members, has power to fine any one breaking their rules. They respect the kazi and employ him to conduct their marriage and funeral services. They differ from ordinary Musalmans by worshipping and offering vows to Hindu gods, and eschewing beef. They are Sunnis of the Hanali school, but are not religious or careful to say their prayers. They do not send their children to school. Some have given up cotton carding

Rangroz, or Dyers, are found in small numbers in some of the larger towns. They are said to represent Hindus of different castes,

and earn their living as husbandmen and servants

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Pirjilrds.

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classes. They speak Deccan-Hindustáni among themselves and Márathi or Kánarese with others. The men are of middle height and dark. They shave the head, wear the beard full, and dress in a Hindu turban or a headscarf, a shirt, a tight-fitting jacket, and a pair of tight trousers or a waistcloth. The women who are of middle height thin and brown, wear the Hindu robe and bodice, appear in public, and help the men in cooking. Both men and women are dirty and untidy in their habits. They keep cook-shops, take engagements for feasts and dinner parties, and serve as house cooks in rich families. Some have English bakeries, and supply the European population with bread, biscuits, and pastry. Those who keep English bakeries are well-to-do; the rest though hardworking and thrifty, from their fondness for date-palm liquor, are poorly clad and much in debt. Their daily earnings from cookshops are never more than ls. (8 as.), for a dinner party they get 1s. to 2s. (Re. $\frac{1}{2}$ -1) a day, and as house cooks 6s. to 12s. (Rs. 3-6) a month with food. They marry among themselves only and form a separate community, but have no special organization and headman, except the regular Musalmán kázi, whom they respect and call to conduct their services. Their manners and customs do not differ from those of ordinary Musalmans. They are Sunnis of the Hanafi school, and are seldom religious or careful to say their prayers. They do not send their children to school; and on the whole are a falling class.

Dhobis, or Washermen, are found in small numbers in some of the larger towns. They are said to represent local Hindu Dhobis converted by Tipu of Maisur (1784-1799). They speak Hindustáni among themselves and Maráthi or Kanárese with others. The men are tall or of middle size, dark, and thin. They shave the head, wear the beard either short or full, and dress in a Hindu turban, a waistcoat, and a waistcloth. The women, who are like the men in face, dress in the Hindu robe and bodice, appear in public, and help the men in washing clothes. Both men and women are clean, but not tidy in their dress. They wash clothes both for Europeans and natives; European masters, who require the Dhobi's entire time, pay them £1 to £2 (Rs. 10 - 20) a month according to the size of the family; Native masters, who generally share the Dhobi's services with five or six other families, pay 2s. to 4s. (Rs. 1-2) a month or 10s. to £1 10s. (Rs. 5-15) a year, with gifts in corn and money on holidays and great occasions. Though hardworking and thrifty, as a class they are excessively fond of liquor and are seldom well-to-do or able to save. They marry among themselves only and form a separate and organized society. They settle social disputes at caste meetings under a headman or chaudhari chosen from the oldest members, who, with the approval of the majority, can fine any one breaking caste rule. They call the regular kázi to conduct their marriage and funeral services. They differ from ordinary Musalmáns in eschewing beef, worshipping and offering vows to Hindu gods, and keeping Hindu festivals. Under no circumstances do they eat with the regular Musalmans. They are Sunnis in name, but care little for the Musalman faith. They do not send their children to school and take to no new pursuits.

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Bhatvárds.

Dhobis.

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Musalmans.
Hajdms.

Haja'ms, or Barbers, are found in small numbers in some of the They are said to represent local Hindu Hajáms and larger towns. to have been converted by Tipu of Maisur. They speak Deccan-Hindustáni among themselves and Maráthi or Kánarese with others. The men are tall or of middle height and dark or olive-skinned. They shave the head, wear the beard full or short, and dress in a Hindu turban, a shirt, and a waistcloth. The women, who are like the men in face, wear the Hindu robe and bodice, appear in public, and add nothing to the family income. Both men and women are dirty and untidy. Barbers earn their living either by shaving chance customers or as house servants. In towns they get 11d. (1 a.) for shaving a man's head, and in families with three or four male members they are paid 1s. to 2s. (Re. 1-1) a month or 6s. to 12s. (Rs. 3-6) a year, with occasional presents in money and corn. Village barbers are paid entirely in grain. The quantity varies from 200 to 400 pounds (5-10 mans) worth £1 to £1 10s. (Rs. 10-15) in addition to occasional gifts on ceremonies and Though hardworking and thrifty they are not sober, and are generally poorly clad and scrimped for food. They marry among themselves only, form a separate community, but have no special organization and no headman to settle their disputes except the regular kázi whom they follow in every respect. They are Sunnis of the Hanafi school, but are not religious or careful to say their prayers. They do not send their boys to school and on the whole are a falling class.

Halálkhors.

Halalkhors, or Scavengers, are found in small numbers in the town of Dhárwár. They are said to represent Hindu Bhangis converted by Tipu of Maisur. According to another account their former home was in Sholapur. They speak either Hindustani or Kanarese. The men are of middle height and dark. They shave either the whole head or half of the head, wear the beard full or short, and dress in a skullcap or turban, a waistcoat, and a waistcloth. The women, who are like the men in face, wear the Hindu robe and bodice, appear in public, and help the men. Neither men nor women are tidy or clean. They work as scavengers and nightsoil men, and are paid 6s. to 10s. (Rs. 3-5) a month. The women work as hard and earn as much as the men. Though hardworking and well paid they are excessively fond of drink, are always in rags, and never save. They form a separate community and have a well organized society. They settle social disputes at class meetings under a mehtar or headman chosen from the oldest members. If the majority approve the headman may fine any one who breaks caste rules. The money raised by fines is spent in drinking and dinner parties. They are Sunnis of the Hanafi school, but are Musalmans in name only. Except that they are circumcised and are married and buried by the kázi, they know almost nothing of the faith. They do not send their children to school, and none have risen to any high position.

Kanjars,

Kanjars, or Poulterers, are found in small numbers throughout the district. They are said to represent Hindu Kanjars converted by Haidar Ali of Maisur. They speak Deccan-Hindustani among themselves and Marathi or Kanarese with others.

The men are tall or of middle height thin and dark. They shave the head, wear the beard full, and dress in a Hindu turban, a waistcoat, and a waistcloth. The women, who are like the men in face. dress in the Hindu robe and bodice, appear in public, and add to the family income. Both men and women are dirty and untidy in their habits, and do not bear a good name for honesty. The men work as servants and labourers, and both men and women gather fuel, rear hens, sell eggs, and twist hemp ropes. They make 12s. Though hardworking they are £1 4s. (Rs. 6-12) a month. excessively fond of liquor and are always poor and in rags. They marry among themselves and form an organized society with a headman of their own, who, with the concurrence of the majority. can fine any one who breaks their caste rules. They differ from other Musalmans in worshipping and offering vows to Hindu gods and keeping Hindu festivals. They are Sunnis of the Hanafi school in little more than name, and are neither religious nor careful to say Except in their marriage and funeral ceremonies, their prayers. they do not employ or obey the kázi. They do not send their boys to school, and none of them has risen to any high position.

Pakha'lis, or Watermen, are found in small numbers in Dhárwár They are said to represent local Hindu Pakhális who were converted by Haidar Ali of Maisur. They speak Deccan-Hindustáni among themselves and Kánarese with others. The men are of middle height and dark-skinned. They shave either half or the whole of the head, and wear the beard short or shave it. Some put a large gold car-ring in the right car, and dress in a Marátha turban, a waistcoat, and a waistcloth, or a pair of tight and short trousers. The women, who are like the men in face, wear the Hindu robe and bodice, appear in public, and help the men in carrying water. Both men and women are rather neat and clean in their habits. They carry water in leather bags on bollock back. They are chiefly employed by Europeans and by the Dhárwár municipality. They have their own bullocks and work for several families getting 10s. to £1 (Rs.5-10) a month from each. They supply Musalmans and others at daily wages varying from $4\frac{1}{2}d$, to 1s. (3-8 as.) from several families. Their average monthly income from one bullock varies from £1 10s. to £2 (Rs. 15-20). Though hardworking they are excessively fond of drink and are generally in They marry among themselves only, and form an organized society with a headman chosen from the oldest and richest members of their caste, who, with the approval of the majority, has power to fine any one who breaks their caste rules; the fine fund is spent in dinner and drinking parties. They have a strong Hindu feeling, keeping Hindu festivals, worshipping Hindu gods, and eschewing beef. They obey the kúzi and employ him to conduct their marriage and funeral services. They are Sunnis of the Hanafi school, but are not religious or careful to say their prayers. They do not send their boys to school or take to new pursuits.

Pendha'ra's, perhaps originally grass cutters from pendha a sheaf, are found in small numbers in Dharwar and Hubli. They are believed to represent local converts of mixed Hindu classes, who

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Pendhárás

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Pendhards.

are said to have voluntarily embraced Islam towards the close of the eighteenth century.1 They are said to have come to Dharwar from Maisur as camp followers to Munro's troops in 1817. They speak a rough Hindustáni with a mixture of Maráthi and Málvi. The men are tall strong well-made and dark. They shave the head. wear the beard full, and dress in a Hindu turban, a tight-fitting jacket, and a waistcloth. The women, who are like the men in face, wear the Hindu robe and bodice, appear in public, and add to the family income. With a few exceptions both men and women. are dirty and untidy. The men earn a living as servants messengers and pony-keepers, making 12s. to £1 (Rs. 6 - 10) a month. The women gather and bring to market headloads of fuel and grass making 3d. to 6d. (2-4as.) a day. Though hardworking, they are much given to drink and to the use of intoxicating drugs. Except one or two rich and well-to-do families, all are poorly clad and badly off. They marry among themselves only and they form a well organized body. They settle social disputes at caste meetings under a headman called mukádam or jamádár, chosen from their oldest and richest families, who, if the majority approves, can punish any one breaking caste rules. They differ from ordinary Musalmans in eschewing beef, in keeping Hindu festivals, and in worshipping Hindu gods. They are Sunnis of the Hanafi school, and some of late have begun to make a little progress in their faith, reading the Kurán and attending the mosque. the exertion of an Arabic and Persian scholar of their own community many have begun to teach their boys the Kurán and Urdu, and also send them to Government schools to learn Kánarese and Maráthi. None have risen to any high position.

The two classes of Musicians or Players are the Kasbans or dancing girls and the Taschis or kettle-drummers.

Kasbans.

Kasbans or Naikans, Dancing Girls and Courtezans, are found in small numbers in Dhárwár, Hubli, and Sávanur. They are said to represent loose women of mixed Hindu classes who became Musalmáns on leaving or on being turned out of their caste. They speak Hindustáni, Maráthi, or Kánarese. In-doors or when they go to sing they wear the Hindu robe and bodice. When they dance some rich and skilful performers put on a gown called peshwás of muslinor gauze dyed red blue or orange, and trimmed with tinsel alce, with a short waist, long straight sleeves, and skirts that reach a little below the knee, a shawl or sela covering the head hanging down the shoulders and wrapped round the body, and a pair of tight satin trousers. All wear Deccan slippers. Their usual ornaments are a necklace, pendants or enrings, bangles, and loose bell anklets known as kadás.

¹ In 1709 on the fall of Tipu several of his chieftains formed a focus or dhurra for the idle and profligate of every persuasion, for needy adventurers, disbanded soldiers, and all fugitives. They marched about ravaging Northern India, Mälwa, and the Decan. By 1814 they had risen to such power that they had gathered about twenty-seven thousand men under several leaders, who, from the support they received from Sindia and Holkar, were known as Sindia Shahi and Holkar Shahi. Their power was crushed by the Marquis of Hastings in 1817. See Pindhari and Maratha Wars, p. 25.

Though slovenly during the early part of the day, towards evening they wash and deck themselves with ornaments and rich clothes and sit on the threshold waiting visitors. They earn their living by dancing, singing, and prostitution. Of late years, according to the general belief because of the looser morals of private women, the dancing girls have not prospered. Many are in debt and many go to sleep without knowing where to-morrow's breakfast is to come from. As a class they are crafty and faithless, fond of pleasure and much given to intoxication and intrigue. They are Sunnis in little more than name. They have little knowledge of their religion, and except that their boys are circumcised and that they themselves are buried with Musalman rites, they have nothing to do with the kazi. Their girls are brought up to dance and sing. Their sons do not play for them and their sons' wives do not dance or sing. Most adopt young girls from poor parents paying their parents either a lump sum or a yearly allowance. They form a separate community with a head náikan who holds a high place among them. They eschew beef and worship and offer vows to Hindu gods. Some of their boys are taught Maráthi and Kánarese, but none have risen to any high position.

Ta'schis, or Kettle-drummers, are found in small numbers in some

of the larger towns. They are said to represent Hindu Taschis

converted by Aurangzib. They speak Hindustani among themselves and Marathi or Kanarese with others. The men are of middle height and dark. They shave the head, wear the beard short or full, and dress in a Maratha turban, a tight-fitting jacket, and a waistcloth. The women who are like the men in face, wear the Hindu robe and bodice, and appear in public, but add nothing to the family income. They are clean in their habits and neat in their dress. They beat kettle drums during marriage and other ceremonies both for Hindus and Musalmans, and are busy except during the rains. For a four days' marriage, besides two meals a day, they are paid 6d. to 1s. (4-8 as.) a day in cash. During the eight busy months their wages average £3 to £6 (Rs. 30 - 60). Though hardworking thrifty and sober, they are badly off and take to new pursuits. They marry among themselves only and form a separate and organized community, settling social disputes at class meetings under a headman chosen from the oldest members, who, if the majority approve, is empowered to fine any one breaking their class rules. They differ from ordinary Musalmans by eschewing beef and keeping Hindu festivals. At the same time they obey the kazi and call

None have risen to any high position.

Christians, numbering about 2356 or 0.26 per cent of the district population, include three main divisions, Europeans, Eurasians, and Natives. Of these Europeans numbered 79 (42 males and 37 females), Eurasians 73 (33 males and 40 females), and Native Christians 2204 (1126 males and 1078 females). Native Christians are divided into two classes, Protestants and Roman Catholics.

him to conduct their ceremonies. They are Sunnis of the Hauafi school, but are seldom religious or careful to say their prayers. They do not send their boys to school. Besides as kettle-drummers some earn their living as husbandmen, servants, and messengers. Chapter III.
Population.
MUBALMANE.
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Táschis.

CHRISTIANS.

Chapter III.

Population.

CHRISTIANS.

Nativo Protestant Christians are found chiefly in Dharwar, Gadag, and Hubli. They are converts made by missionaries belonging to the Basel Evangelical Mission which began work in 1839. Before their conversion most Protestant Native Christians belonged to the Lingáyat, Kurubar, Deváng, Sáli, Badige, Agasalaru, and Holaya or Mhár castes. They have no divisions and they eat together and intermarry. They are short, dark, and muscular. The home tongue of some is Kanarese, of some Tamil, and of a few Tulu. They live in one-storeyed houses with flat or tile roofs. Their daily food is rice or Indian millet bread, pulse, vegetables, and animal food, and their holiday dishes are sweet cakes made of wheat flour, pulse, and sugar. The men dress either in a waistcloth or trousers, a short or long coat, and a headscarf; and the women in a robe and bodice without passing the skirt of the robe back between the feet. Some of them are husbandmen, some artisans, some missionaries and catechists, and some weavers and dyers. A family of five spends 12s. to £1 10s. (Rs. 6-15) a month on food. Their ritual is a mixture of the rites of the Reformed Church of Switzerland and of the Lutheran Church of Wurthenburg. Sunday is kept as a day of rest and religious exercise. Their holidays are Christmas, Good Friday, Easter Sunday, Ascension Day, and Pentecost. On Sundays and on close holidays they attend church in the morning and evening when service is held in Kanarese. Every year they celebrate the anniversaries of the establishment of the local and district missions. Their only religious ceremonies are baptism and confirmation. Baptism is performed both on infants and on adult converts; sacrament of confirmation is administered only when a person is well-grounded in the knowledge of the scriptures. On the occasion of the baptism of their children especially of their first-born, those who can afford it, feast their friends and relations. Girls are married after thirteen and boys after sixteen. Three months before a wedding the parties give notice to the pastor of their intention to marry. On the day fixed for the wedding the bride and bridegroom, decently dressed and accompanied by friends and relations, go to the church where they are married by the pastor. On their return from the church the whole Protestant community of the village or one or two members from each house are feasted, and the bride and bridegroom are presented with clothes or ornaments by their friends and relations. Cases of misconduct are enquired into and punished by the pastors on the evidence of the members of the congregation. They send their boys and girls to schools kept by the missionaries, where reading, writing, arithmetic, geography, and history are taught. They appear to be a rising class.

Native Catholic Christians may be divided into three classes: Konkani or Goa Christians, Kánarese or local converts, and Tamil or Madrási Christians. The home tongue of the Goa Christians is Konkani, of the Madrási Tamil, and of the local converts Kánarese. The Madrásis and Konkanis eat together but do not intermarry, while the Kánarese or local converts neither eat nor marry with the Konkanis or the Madrásis. With a few exceptions the Konkanis are fair and middle-sized with well-out features, the local converts

are short and dark, and the Madrásis are still darker and shorter. The Konkanis and Madrásis live in one-storeyed tile-roofed houses with walls of brick and mud, and the Kanarese live in one-storeyed houses with flat roofs. Their daily food is rice, pulse, Indian millet, bread, and flesh. All drink liquor and eat pork and beef, except the Kánarese Christians who object to eating beef. The Konkani men dress in a pair of trousers, a short coat, boots, and a hat, Madrasi men in a waistcloth, a long coat, a headscarf, and shoes, and Kánarese men, like Dhárwár Kurubárs and Kumbhárs: the women of all three classes dress in a short-sleeved bodice and robe. which is worn hanging like a petticoat. As a class the Catholic Christians are industrious, hospitable, and thrifty. The Konkanis are either Government servants, labourers, or domestic servants; the Madrásis are mostly domestic servants; and the Kanarese earthen pot-makers, blanket weavers, husbandmen, and unskilled labourers. All observe the rites and holidays of the Roman Church. Children are baptised as soon as possible after the seventh day after birth. If the child is healthy it is taken to the church, if it is weaker it is baptised at home. Girls are married after twelve and Proposals for marriage come from the boys after sixteen. boy's side. At the time of betrothal close relations and friends are feasted, and among Kanarese Christians the bride's father receives a sum of money from the bridegroom's. When the day fixed for the marriage draws near, booths are raised at the houses both of the bride and of the bridegroom. During the marriage ceremony country music is played in the booth and the bride and bridegroom are rubbed with turmeric paste, and friends and relations send presents of clothes and provisions. Among the Kanarese Christians when a girl comes of age she is scated apart for a while, then bathed, and presented with new robes. No such ceremony is observed among Konkani and Madrási Christians. When a person is on the point of death the priest administers to him the sacrament of extreme unction or anointing. After death the body is bathed and dressed in holiday clothes in the case of Konkanis and Madrasis, and is covered with a shroud in the case of Kanarese Christians. It is laid either in a coffin or in a bier and carried in procession to the church. From the church after prayers the body is carried to the burying ground and is there buried. Kanarese Christians give a feast to their caste people on the third day after death; Konkani and Madrási Christians do not hold a third day feast. Cases of grave misconduct or scandal are enquired into and punished by the priest with the help of the adult castemen, the punishment being fine, kneeling in the church during the service on Sundays, and excommunication. So long as a person is excommunicated he is not allowed to enter the church or to mix with the community. Of the

Pa'rsis, numbering thirty-one, are found in Dhárwár, Hángal, and Hubli. They are chiefly traders, contractors, and shopkeepers. Their dress customs and religious rites do not differ from those of the Pársis in Thána and Bombay.

three classes Konkanis alone send their children to school.

Chapter III.
Population.
Christians.

Pársis.

CHAPTER IV.

AGRICULTURE.

Chapter IV.
Agriculture.

According to the 1881 census, agriculture supports about 600,000 people or sixty-eight per cent of the population. The details are:

Dhárwar Agricultural Population, 1881.

1					
Age,	Males,	Females.	Total.		
	117,227	111,979 192,088	220,206 379,938		
Total	305,077	804,067	600,144		

Husbandmen,

Dhárwár husbandmen are Lingáyats, Maráthás, Musalmáns, Bráhmans, Kurubars, Lavánás or Lambánis, and Mhárs. the Lingayats are by far the richest and most important. Of these headmen of villages are usually Lingáyats, and the Lingáyats form the bulk of the cultivators of Dhárwár, as Marátha Kunbis form the bulk of the cultivators of Khandesh, Nasik, and the North Deccan. The Lingayat husbandman differs both in body and mind from the Maratha husbaudman of the North Deccan. He is a South Indian with a smaller northern strain even than the Marátha. stronger and blacker, a harderworker, with more forethought and with a strong turn for trade speculation. He is well disposed, intelligent, and enterprising, and is shrewder than a casual observer would imagine. As a body Dhárwár Lingáyat husbandmen are better off than north Deccan Kunbis, and very much freer from debt. They have passed through many changes within the last hundred years. To them, which it was not to the north Deccan Kunbi who had his share of the spoil, Marátha rule was an unmixed evil. For many years after the introduction of British peace and order the curse of rack-renting handed down by the Maráthás kept the husbandman deep in poverty. With the introduction of the revenue survey and the opening of roads between 1840 and 1850 their state improved. Between 1862 and 1871 came the great rise in value of all field produce, especially of American or saw-ginned Dharwar cotton, which alone, according to Mr. Walton, in those ten years enriched the district by about £8,150,000 (Rs. 8,15,00,000). Between 1862 and 1865, no less than £4,700,000 (Rs. 4,70,00,000) or a yearly average of £1,175,000 (Rs. 1,17,50,000) were amassed by the growers and dealers in Dharwar American cotton.² Dealers

¹ Bom. Gov. Sel. CXLVIII, 96-97. ² Walton's Dhárwár Cotton, 73.

backed by Bombay speculators paid as much as £10 (Rs. 100) the acre for planted cotton fields. The flood of wealth turned the people's heads. They did not know what to do with their money. At village festivals, numbers of landholders appeared with carts the naves of whose wheels were rounded with bands of silver.1 1871 many have impaired those gains by unwise cotton speculation, by extravagance, and by mismanagement. At the same time the price of cotton has fallen; years of scarcity and famine have wasted the district; and revised settlements have greatly added to the land tax. Still in spite of their loss and suffering from the 1876 famine the mass of the husbandmen of the cotton plains are (1881) well-to-do. Many Lingáyat husbandmen have large holdings. the north Decean the business of tilling the soil and of trading in its produce as a rule are distinct; in Dharwar the two are to a large extent united. Not only does the landholder often take his produce to distant Kárwár or Kumta, he either brings back goods for the sake of the hire, or himself invests in such coast produce as finds a a ready inland sale. Many Lingáyat landholders are moneylenders and cotton ginners, and many among them heard stores of grain, which they sell at a high profit in times of searcity. They generally keep a small staff of permanent farm servants to plough and look after their cattle, and at times temporary labour is largely employed for weeding and reaping.

Colonies of Maráthas are mixed with Linguyats in many parts of the district, and scattered Maratha families also occur in a large proportion of villages. The Marathas seem less well off than the Lingavats and have less the knack of making money by moneylending, grain dealing, and cotton trading. The protection to creditors given by the civil courts is said to be the cause of the indebtedness of the poorer husbandmen, but indebtedness is less general than among north Decean husbandmen. Musalman husbandmen, of whom there are many, as a rule, have small holdings, and are not prosperous. Brahman husbandmen are few, though a good many Brahman pleaders and retired Government servants invest their savings in buying the occupancy right of fields. These Brahman landholders do not till with their own hands. They either let the land or have an agent to mauage its tillage. the land is let the tenant pays the over-holder sometimes in money and sometimes in grain. If, as is the rule when the overholder is an absentee, the rent is paid in money, it amounts to two or three times the Government assessment. When the rent is paid in kind the tenant does not pay the Government assessment unless he is bound to pay it by a previous contract. As a rule the landlord recovers from the tenent of sthird to one-half of the whole produce. The Kurubars or Shepherds and the Bedars or Hunters and now watchmen, form a considerable section of the husbandmen. husbandmen they are careless and stupid, content with small results, and seldom rich or prosperous. A few of the wild pack-bullock and

Chapter IV.
Agriculture.
HUSBANDMEN.

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Soil.

wood-cutting Lavánás or Lambánis, hold land in the west of the district, and here und there a few Holáis or Mhárs cultivate.¹

For tillage purposes the district is divided into the malladuor malnad that is the damp west and the beilu shime or dry east. The malladu is the tract on the border of the Kanara forests in the west and southwest of the district. It is subject to frequent and heavy rain. It is most favourable to the growth of rice and sugarcane, which, to succeed at all, must have abundant moisture. In these western lands the usual dry-crops of the open eastern plain are seldom grown. The only dry-crops are the coarse hill grains, rági Eleusine corocana, súve Panicum miliare, navani Panicum italicum, and jola Sorghum vulgare. Of these ragi and save are grown in comparatively small quantities, and narani and jola are sown only in two or three fields in a village and often not at all. In the beilu shime or dry eastern plain rice is seldom or never grown and sugarcane is grown only as a garden crop. The soil is best suited for dry-crops especially for cotton, gram, and wheat. Along the eastern fringe of the wet west lands, through the whole length of the district, from north-west to south-east including the towns of Dharwar Hubli Bankapur and Kod, runs a belt of country which as regards soil climate and vegetation unites the characteristics of the moist hilly west lands and the dry eastern plains. In this transition region the soil is generally a reddish alluvial clayslate crossed here and there in an easterly direction by narrow belts of black cotton ground. This black soil is of superior richness probably owing to the mixture of particles of red soil, which, without changing the appearance and character of the black soil, lessen its clayeyness and increase its power of taking in water. Towards the east of this belt the rainfall is too scanty and uncertain for the growth of rice. So, also, towards the south-west the climate becomes too moist for dry-crops, and ragi and other poor grains take the place of millet. parts of this transition tract, dry and wet crops are often sown in the same field, so that, if the season proves too dry for rice, a crop of millet may save the landholder from complete loss. In Kod and Hángal in the south of this tract a number of large lakes water much rice and garden land. In some villages, on the eastern border of this tract, tobacco grows freely; in others the cultivation of chillies is carried on with great success. In the malladu or rainland, wherever the underlying laterite does not rise to the surface, the soil is good. The best soil called kagadali is a red mould formed of a fine iron-bearing gravel mixed with quartz pebbles and clay slate. Where the chlorite schists and clay slates predominate the soil is a light coloured loam of great depth called jeddi mannu. When untilled for many years the red soils often assume a most deceiving appearance. The surface soil is washed away and either a coating of loose gravel and quartz stones, or a thin layer of hardened clay is left into which water hardly passes and on which even grass hardly grows. The soil close under the surface, if long undisturbed, becomes hard and dense and seems almost proof against water. But after the merest surface scratching, the rain is able to

¹ Chiefly from materials supplied by Mr. F. L. Charles, C.S.

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remain on the surface and soften the under soil, which can be deeply ploughed with the greatest case, and, with a little manure. is extremely fertile. The light soil or jeddi mannu is the true rice soil. The earthy matter of this rice soil, as in west Bankapur, is chiefly decayed clay slate. By the action of water, tillage, and weather, it becomes a stiff, compact, light-coloured clay, so retentive of moisture, that in most of the lower lands water is found throughout the year a few feet below the surface. The soil on the highest and most open lands has little depth, and, even with manure and care, yields only one poor crop of rice in the year. Between the highest and the lowest situations, the soils are fairly deep, and, in seasons of abundant or even of average rainfall, generally hold moisture enough to yield a crop of pulse after the main rice harvest is over. The soil in the valleys or low lands is of superior richness. It is black or a rich dark brown and may almost be classed under the head of alluvium. This soil yields luxuriant after-crops, and its abundant moisture makes it specially suited for sugarcane. The best rice land is in several respects more valuable than the black cotton soil. The best rice land has much moisture, while the cotton land has no means of irrigation; the best rice land only occasionally wants manure, the cotton land wants manure every third year; the rice land seldom wants the labour and cost of ploughing, the cotton land must be ploughed every year. The best black soil sometimes yields a second crop, the best rice soil always yields a second crop and this with less labour than the black soil. To prepare the black soil for a second crop it has to be ploughed, broken by the kunti or heavy hoe, levelled with the ballesal kunti or light hoe, sown with the seed drill or kurgi, and once more levelled with the light hoe. In the best rice land the field is simply ploughed once, is closely sown by the hand, and to cover the seed the korudu or leveller is run over the surface.

By far the greater part of the open country is black ground or yeri bhumi. Its qualities are admirably suited to the dry climate of the tableland. Its great power of holding moisture enables its crops to bear unharmed seasons of drought which would prove fatal to any crop on the red soil. In these black soils nature to a great extent does what in other soils is left to the plough. In the hot weather, as the soil shrinks, it becomes fissured with cracks, two or three inches wide and about eighteen inches deep which divide the surface into blocks two to three feet square. The first heavy rainfall washes the surface soil into these cracks, and fills them removing the surface soil and exposing a fresh under-layer. sometimes in fields intended for cotton, instead of the plough the people use the heavy hoe or kunti drawn by two or four bullocks. This loosens the surface three or four inches deep and uproots what weeds there are though weeds are few in cleanly kept fields. loosens the soil to a considerable depth and this scarping is enough in ordinary years. Once in six, seven, or eight years the plough is used to uproot deep-scated heavy weeds and to disturb the subsoil. When it gets covered with matted grass and babbul scrub the surface becomes cut in deep water runs and pitted with holes and cracks. It is also covered with minute lime nodules which as they show Chapter IV.
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through the grass make the soil look white and glary. The chief black-soil crops are cotton, wheat, gram, oilseeds, and the later varieties of Indian millet. Except a few gardens at Annigeri in Navalgund, and some other villages with patches of brown soil no watered land occurs over the whole black plain. To the general black soil character of the eastern plain the Kappatgudd hills form an exception. There the soil is stony red alluvial called kennela or musari somewhat like the reddish soils of the hills near Dhárwár and Hubli. Similar soil occurs among the granite ranges and rocks to the south-west of the Kappatgudd range towards the Varda river. In the cast of Ránebennur is much stony and unarable soil called kalluncla or dáre in which angular nodules of stone lie so close packed that the plough can hardly enter.

ARABLE AREA.

Of an area of 4612 square miles or 2,953,037 acres, 2,858,678 acres or 96.80 per cent have been surveyed in detail. Of these 169,738 acres or 5.93 per cent are the lands of alienated villages. According to the revenue survey, the rest contains, 2,271,057 acres or 79.44 per cent of arable land; 42,882 acres or 1.50 per cent of unarable; 47,168 acres or 1.65 per cent of grass or kuran; 176,606 acres or 6.17 per cent of forest; and 151,227 acres or 5.29 per cent of village sites roads and river beds. Of the 2,271,057 acres of arable land in Government villages 621,294 or 27.36 per cent are alienated. In 1882-83 of the arable area of 1,652,216 acres in Government villages, 1,503,011 acres or 90.97 per cent were held for tillage. Of this 6963 or 0.46 per cent were garden land; 86,873 acres or 5.77 per cent were rice land; and 1,409,175 acres or 93.75 per cent were dry-crop land.

HOLDINGS,

In 1882-83 the total number of holdings was 77,478 with an average area of about twenty-eight acres. Of the whole number 7675 were holdings of not more than five acres; 11,937 were of six to ten acres; 22,575 of eleven to twenty acres; 26,976 of twenty-one to fifty acres; 6145 of fifty-one to one-hundred acres; 1674 of 101 to 200 acres; 294 of 201 to 300 acres; 94 of 301 to 400 acres and 108 above 400 acres. The details are:

Dhármár Holdings, 1882-83,

Sub-Division.	Up to 6 Acres.	10	11 to 20 Acres.	21 to 60 Acres.	100	200	201 to 300 Acres.	400	400		Rental.	Area.
Dhárwar Hubli Natalgund Gadag Bankapur Ránebennur Hángal Karajgi Kalghatgi Kod	432 546 339 741 836 1840 430 982 1446 826	1335 667 1101 961 10:6 684 1361 800 1467 1869 647	1624 1697 1071 1619 2623 1644	4290 1936 2237 1839 2627 1080 2568 2496	1148 426 480 248 603 184 343 769	67 153 308 350 127 108 76 145 52 56 232	14 27 61 63 26 6 12 29 4 8	7 5 22 23 7 4 2 7 2 15	8 8 31 25 6 9 3 1	7511 5684 9845 9981 5997 6479 6076 6830 5273 8913 6090	18,376	Acres. 170,683 160,625 316,220 335,411 176,149 161,937 118,587 200,640 91,606 169,194 220,806
Total	7675	11,937	22,575] 26,976]	6145	1673	204	04	103	77,478	229,720	2,156,888

STOCK.

In 1882-83 the farm stock included 40,872 carts, 89,323 ploughs, 258,510 bullocks, 151,379 cows, 40,523 he-buffaloes, 83,452 she-buffaloes, 5478 horses including mares and foals, 6819 asses, and 231,125 sheep and goats. The details are:

Dhárwár Farm Stock, 1882-83.

Sup-Division.	Ourts,		Propossa.			[Burpatoer.				
	Rid- ing.	Carry.	Two Bul- lock.	Four Bul- lock.	OT74.	Cows.	Ho.	She.	Horses.	SHEEP AND GOATS	Asses
Dhirear Hobli Navalgund Gadug Bankapar Rinebennur Hangal Karayai Kalghugi Kod Iton	162 47 91 11 15 8	4614 4306 3918 4170 4030 8111 3076 3718 2144 3893 2374	8547 5141 2263 7206 8212 7011 8701 7320 7822 12,636 3731 78,768	1126 330 410 1419 712 2191 1526 1726 635 10,535	28,533 23,273 23,646 23,153 24,104 22,781 34,801	15,482 8066 6962 12,289 16,218 12,403 18,954 14,210 17,747 23,221 6312	2268 1729 2535 4747 2010 5810 2761 6210 5139 1438	7392 9630 8597 9459 6810 9791 6514 11608	484 500 519 561 410 403 551 403 352 259	16,277 13,088 20,005 48,616 12,096 31,610 9930 20,115 4725 18,007 20,851	503 1813 1047 797 254 1405 150 359 281 239 435

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STOCK

A PLOUGH.

IRRIGATION.

One pair of oxen can till six to eight acres of rice land, ten to fifteen acres of ordinary dry-crop land, and thirty to forty acres of black soil. Thirty-two acres of black soil and eight acres of common soil or fifteen acres of common soil and five acres of garden land would enable a husbandmen to live like an ordinary retail dealer. In good years a man with a holding of this size might save; but as a good year does not come oftener than once in five years, the owner of so small a holding would find it difficult to save much.

The Poona-Harihar road, which runs north-west and south-east, divides the district into two belts, the hilly and woody west rich in water both for drinking and for tillage, and the open waterless east. Parts of Navalgund and Ron, in the eastern plain, which are crossed by the Bennihalla, are particularly badly off for water. small streams dry early in the hot season, and what water is found by digging in their beds is too brackish for drinking. The well water is also apt to grow brackish. So short is the supply that from March to May the people of each caste form themselves into a water club, and every two or three days fetch water in bullock or buffalo carts from a distance of two or three miles. of these parts is not of recent date. Under the Peshwas (1756-1817), officers who fell into disgrace were often sent to Irrigation is chiefly from govern this waterless or nirial land. ponds and reservoirs, in some cases with the help of canals. The pond system of irrigation is common in Madras and Maisur, but is rare in the Bombay Presidency. Three conditions favour the multiplying of ponds and reservoirs in west and south-west Dharwar: the abundance of suitable sites, the certain and long continued local rainfall, and the absence of under-ground water. The stream beds and valleys among the low ranges of metamorphic schist supply numerous sites suitable for storage lakes. In the western subdivisions of Hangal, Kod, Kalghatgi, and Bankapur seldom more than four and often not more than two months in the year pass without rain. The absence of under-ground springs seems to be due to the uprightness or highly inclined position of the clay slate and associated rocks which if flatter might have formed waterbearing strata. Except below ponds wells are rare.

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IRRIGATION.

Reservoirs.

Most of the ponds and reservoirs are old works. It is not known when and by whom they were made. But most are believed to date from the Vijayanagar or Anegundi kings (1335-1570) who were famous for their success in water works. Almost all traditions of local prosperity centre in the first half of the sixteenth century, the reign of the great Krishna Ráya (1508-1542) who was famous for the number and magnitude of his public works.1 During his reign the great lake near Shiggaon five miles north of Bankapur and other fine reservoirs are said to have been built. The most remarkable work, which is said to have been planned and carried out by a minister named Damak Mudh, was the damming in no less than seven places of the half mile broad Tungbhadra. Across this great river dams or bandárás formed of gigantic blocks of stone, often many tons in weight, were thrown. From five of these huge works canals, led along both sides of the river, water many miles of garden which are now the richest parts of Belári on the south bank and of the Nizam's country on the north bank of the Tungbhadra.² In 1881-82 there were 2979 ponds and reservoirs or one pond for every 1.52 square miles. Of these 1021 were in Kod, 841 in Hángal, 399 in Kalghatgi, 329 in Bankápur, 129 in Dhárwár, 105 in Hubli, ninety-nine in Karajgi, twenty-four in Navalgund, twenty in Gadag, and twelve in Ranebennur. These together water 93,730 acres of land paying a total assessment of £29,625 (Rs. 2,96,250). Of the whole area 87,246 acres were rice lands with a total assessment of £25,054 (Rs. 2,50,540), 5275 acres were garden lands with a total assessment of £4437 (Rs. 44,370), and 1209 acres with a total assessment of £134 (Rs. 1340) assessed at dry crop rates are now watered. The average assessment on each pond is about £10 (Rs. 100) and the area watered from ponds is 7.06 per cent of the whole tillage. The average area watered by each pond is thirty-one acres. Some ponds water the lands of only one or two holders, others water fifty to eight hundred acres often in several villages. These reservoirs as a rule are formed by a low and often irregular dam. They often depend for part of their water on the escape from higher lakes. Often, also, the natural catchment area is increased by catch-water drains or by supply channels from streams. As a rule the waste-water escapes are simple channels cut They are generally at the end of a long in the hard soil or gravel. arm of the pond to avoid breaching the main dam. The outlet sluices, of which the larger reservoirs have generally one or two, are made under and through the dam. These outlets are often masonry works with horizontal holes, stopped with wooden plugs, and surmounted by elaborately carved guide stones for the pole of the plug. Sometimes, especially in the smaller reservoirs, the water is let out by a simple cut through the dam, the opening being roughly filled with earth, stones, and brushwood. The larger lakes are almost always faced in front with walls of dry rubble stone. Below each reservoir

¹ Probably as in other dynasties, Krishna Baya the greatest of the line has in tradition the credit of the works made by all the members of the family.

² Bom, Gov, Sel, CLV. 74.

the land is laid out in terraces, and the distribution of water is managed entirely by the people, disputes being settled in ordinary cases by the leading members of the village and in grave cases by the officers of the irrigation department. Most of these reservoirs dry soon after the rains are over, the water being drawn off for rice and other early crops during the breaks in the rains. This practice is necessary to make good the difference between the nsual local fall of about thirty inches and the sixty inches which without the help of irrigation rice requires. The watering power of a reservoir depends on its position as well as on its size. In the west where the rainfall is heavy the amount of water which can be drained off a lake and used in watering is much greater than in the dry east.

Some of the ponds though their supply of water does not last throughout the year, are used for watering garden crops. In this case the people have to trust either to the water in wells sunk below the dam, or to the rain-storms of March and April to help the crops through the time when the reservoir is dry. The chief garden crops under these pends are betel and cocea-palms, plantains, hetel vines, and sometimes sugarcane. The evil of the pond system is that the pends slowly but gradually have their storage capacity lessened by the deposit of silt. Formerly the landholders, who used the water of the lake, made yearly contributions in money or in labour to remove the silt. This practice has long ceased. Government are now often asked to be at the expense of removing silt deposit, but the clearing of silt is a very costly and unproductive mode of increasing storage. The effect of years of silting can generally be counteracted by slightly raising the whole water surface by adding to the height of the crest of the dam. The only advisable silt clearance is what is required to raise the crest of the dam or to keep the dam in repair. As regards the repairs of these lakes the principle adopted by Government has been to leave the ordinary renairs to the people who profit by the work. When for the proper maintenance of the works large repairs, raising the dam crest, widening the waste weir, or repairing outlets, have become necessary, Government step in and do the work. In such cases a contribution from the villagers used generally to be levied. Since 1580-81 Government, have decided to undertake all such repairs at their own cost. Petty repairs to catch-water drains and to water-channels are still left to the people. Repairs and improvements to masonry works are always undertaken Government. In the case of improvements either a contribution is asked from the villagers or an agreement is taken from them to pay such extra rates or irrigate such extra land as may be required to make the proposed improvements pay. During the ten years ending 1881-82 the total amount spant on repairs was £11,421 (Rs. 1,14,210)

Of the 2979 pends and reservoirs the chief are at Haveri in Karajgi, at Nagnur in Bankapur, and at Dambal in Gadag.

The Haveri lake, about seven miles south of Karajgi is one of the largest and most important reservoirs in the district. It has a catchment area of sixty-nine square miles in which are many other pends and reservoirs. It rarely fails to overflow every year, and

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lake is believed to date from the time of the Vijayanagar kings (1335-1570). The maker of the lake intended to close the gap in the hills through which the Kumudvati feeder of the Tungbhadra flows into Kod, and by this means to form a lake on the south side of the range of hills which divide the Masur valley from Maisur. This was accomplished by throwing up an earthen embankment, now about 800 feet thick at the base and 100 feet high, faced towards the lake with huge stone blocks descending in regular steps from the crest of the embankment to the water's edge. Two similar embankments were also thrown across other gaps in the hills to the right and left of the Kumudvati valley to prevent the pent-up waters escaping by them, and a channel was cut along the hills for the overflow of the lake when it had risen to the intended height. When full this lake must have been ten to fifteen miles long and must have supplied water for the irrigation of a very large area. The neighbouring hills still bear traces of vast cuttings for material and of the roads by which it was brought to the site. A moderate sized fort on the hill commanding the lake is said to have been built for the protection of the work people. Each of the three embankments was provided with sluices built of huge slabs of hewn stones for the irrigation of the plain below, and two of these remain as perfect as when they were built. These sluices were built on the same principle as other old Hindu local sluices, a rectangular masonry channel through the dam closed with a perforated stone fitted with a wooden stopper. But, as the sluices had to be in proportion to the size of the lake, instead of the small stone pillars which in ordinary works carried the platform over the stopper, the supports were formed of single stones weighing about twenty tons each. To the upper sluice a tradition of human sacrifice attaches. As it was the crowning point of this great work the Vijayanagar king and his court met to see the great single stone pillars raised to their places. For days the workmen's efforts were vain. At last it was known that the Place Spirit was angry, and, unless a maiden was offered to her, would not allow the pillar to be raised. Lakshmi the daughter of the chief Vadar or ponddigger offered herself, and was buried alive under the site of the pillar. The spirit was pleased, and the pillar was raised and set in its place without mishap. In honour of Lakshmi the sluice became a temple.2

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¹Bom. Gov. Sel. CLX. 87.
² Lieut.-Colonel Playfair, R. E., Superintending Engineer for Irrigation, 27th October 1879. According to a second legend the patil of Masur, whose family lived at Pura Parkeri in the Maisur division of Shimoga had a beautiful daughter Kenchava whom the Vijayanagar king wished to marry. As her father was of a higher caste than the king the girl refused the king's offer and fied. Afterwards her parents wished to marry Kenchava to the patil of Isur in the Shikarpur sub-division of Maisur. They set out to celebrate the marriage, but on passing a temple now covered by the waters of the Madag lake, Kenchava entered the temple and devoted herself to the god. When the lake was made, Kenchava refused to leave her god, and, when the first floods of the rainy season came, the temple was hidden under the lake and the girl was drowned. It was a season of severe floods and a watchman was set to watch the dam. Kenchava entered into this watchman and told him to go and tell the patil that unless he offered her a woman nine months with child she would burst the lake.

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The lake was finished and filled. But in some heavy flood it burst not through the carefully closed valley but by the most westerly of the three embankments. Through this outlet a vast body of water forced its way in a deep groove with a fall of nearly 100 feet, wearing a chasm with nearly perpendicular sides as if cut with a knife. As the pressure of the water grew lighter and the strata to cut became harder, the wearing ceased, and a certain quantity of water remained in the bed of the lake. The surplus now passes in a pretty little waterfall over the point where the cutting ceased. After this disaster no steps were taken to make use of the water which the broken lake still held. The builders abandoned the undertaking, and, till recent times, unfinished channels and the dam remained overgrown with forest It was sometimes visited to see the single stone of the main sluice which remained one of the wonders of the country. After the country passed to the English two difficulties prevented any use being made of the water stored in the broken lake. When the breach occurred, the lowest of the old native slaices, which offered the only channel for drawing water through the enormously thick dam, was left too high above the surface of the water to be of any value. Any attempt to dam the outlet chasm, and so raise the level of the lake sufficiently to use the old sluices, was provented not only by its great expense, but by the opposition of the Maisur villagers, whose lands lay on the margin of the lake, and would be swamped by any rise in its level. Owing to these difficulties nothing was done until, in 1858-59, Lieutenant-Colonel Playfair, R. E., then executive engineer, thought that if a culvert could be laid below the old sluice the lake could be successfully tapped. This was done under Colonel Playfair's immediate supervision. For this the old native sluice had first to be cleared as it was filled with dirt. Clearing was begun on both sides, not without the opposition of the Maisur people who at first drove the workmen off, and objected to anything being done on their side. When the two parties of workmen came within 100 feet of each other progress was stopped as the stones that supported the roof were found to have fallen in. The sluice appears to have been originally laid on the rocky surface of the valley, roofed with enormous stones, and the dam

The watchman said he could not leave his post. Kenchava promised that if he went she would not break the big dam but that if he was long in coming back she would burst through one of the hills. The watchman went and gave the headman Kenchava's message. But the headman paid no heed to his message, punished him for leaving his post, and offered Kenchava no sacrifice. Enraged with his insolence Kenchava broke through the hill and the embankment as well. Poor people used to go to the lake and beg Kenchava to lend them nose and carrings to use at a wedding and found what they wanted at the water side. One man forget to return the ornaments and Kenchava no longer provides them. In 1870, a fisherman's tackle got entaugled in the roof of the under-water temple. Diving down to free his tackle the fisherman entered the temple and saw a golden image of Kenchava. She warned him to tell no one she was alive, and told him that on the day he let out her secret he would burst a blood-vessel and die. He asked her how he could get out of the temple; she gave him a push and he was on the surface. He kept his scoret for two rears, told it, burst a blood vessel, and died. In seasons of drought, the heads alistif, wiles in Shikarpur come to this lake with a round piece of gold and a nose-ring. They lay food on a small raft and pushing it into the lake pray Kenchava to send ram. Dr. Burgess' List of Archwological Remains, 17-18.

built over it. The weight of the one hundred feet of earth had been too great for the sluice-roof. In the part where the sluice-roof had fallen the further clearing became a matter of great danger. The only plan appeared to be to gently dig over the broken stones and trust to find sounder ones beyond, and thus again to get a roof over the heads of the workmen. This attempt was successful. Only a few of the covering stones had fallen in; and the earth above them was sufficiently consolidated by time to allow of a passage being dug through it. The two parties at length joined, and the old subterranean gallery was opened through its whole length of 800 feet. The digging of the culvert below the floor of the old sluice was then begun, the old work acting as a ventilator as well as a roof till the new tunnel was arched. All went well till towards the centre where a mass of extremely hard rock gave much trouble.

As a part of Colonel Playfair's scheme two canals were to be dug, leading off 331 feet above the original bed of the river. Six miles of the whole length of the 161 miles of the left bank canal, and eight miles of the whole length of the 151 miles of the right bank canal have been dug. The left bank canal is carried along the rear slope of the main embankment until it reaches the new river channel which it crosses by a large aqueduct. In 1882-83 four miles of the right bank canal were planted with about 7200 trees mostly bubbuls, mangoes, and nims. The total area watered was 482 acres and the crops watered were mostly sugarcane, rice, garlic, and onions. The water rates vary from 16s. (Rs. 8) an acre for twelve months' crops to 2s. (Re. I) an acre for rainy-season crops. lake might easily be made to hold a great deal more water. Even by boarding the waste weir the storage might be greatly increased. What prevents the carrying out of fresh works is that every foot which the surface of the lake is raised swamps a large area of rich land. In 1872 an attempt was made to induce the Maisur villagers to accept compensation and let the land be flooded; but the attempt failed. The matter is still under consideration, and it is hoped that some arrangement may shortly be made. At present as the canals are small, with only a slight fall, it is not possible to draw off the lower portion of the water above the sluice sill level, and the upper portion is lost by evaporation. As the total depth of the lake above the sill of the canal sluices is only 4.50 feet little water is available for late and hot weather crops. The ordinary rainfall is enough for the common early crops which are grown to a great extent in the neighbourhood.

The only important system of canal irrigation is on the south bank of the Dharma, the Varda's chief feeder, which rises in the Sahyadri hills about twenty miles south-west of Hangal. The work is about three hundred years old, but most of the masonry is stones taken from Jain or Chalukyan temples. The head works of the main canal are at the village of Shringeri about five miles south-west of Hangal. A solid masonry weir thrown across the stream raises the water a few feet, and two canals are led off one on each bank. The left bank canal which is called the Kamanhalli canal is about three miles long. It feeds four reservoirs and waters a small area of land on its way. The right bank canal, which is known as

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the main Dharma canal, is seventeen miles long, passing through the villages of Sovhalli, Gejihalli, and Gaviapur. Near its head it sometimes carries over 400 oubic feet the second. At Gayranur it crosses a road under a masoury bridge and continues through the land of Sirmapur and fills the two large reservoirs of Dholeshvar and Surleshvar. At Surleshvar, seven miles from Shringeri, the canal divides into two branches, one flowing east to A'dor and the other flowing south to Alur. Each of these two main branches throws out a number of smaller channels which command a considerable tract of country between the Dharma and the Varda. The Dharma is also dammed by a masonry weir at a point about thirteen miles below Shringeri and a canal known as the Naregal canal is taken off at the right bank. This supplies three ponds at Naregal besides watering the land under its immediate command. The Dharma has a catchment area of sixty square miles at the site of the main canal headworks which is densely covered with forest. This forest land adds greatly to the value of the Dharma as it gives off the rainfall in manageable quantities and over lengthened periods. The Naregal canal intercepts the drainage from a great deal of the land watered by the main Dharma canal as well as the supply afforded by the catchment area of the river between the two head works. The Dharma flows only during the six wet months. To make use of its water during the dry months, a number of ponds were built by the original projectors of the scheme. These ponds are below the canals, and are filled by the surplus water of the river during the rains. Storage is thus obtained during the hot months and irrigation is perennial. 1881-82 these canals supplied ninety-two ponds of which thirty-nine were fed from the main caual, fifty from the branch canals, and three from the Naregal canal. The largest of these pends are at Dholeshvar, Surleshvar, Arleshvar, A'dur, Havanji, Balambid, A'lur, and Naregal. In 1881-82 the area watered by the caual and the ponds dependent on the canal was 8660 acres. Of these 8660 acres 208 were watered by the Kamanhalli or left bank canal, 7399 by the main and branch Dharma causls, and 1053 by the Naregal canal. Of the 8660 acres 8127 were rice land and 533 were garden land. The gardens under the Naregal reservoir are very rich, yielding the finest betchnits in the neighbourhood. The rovenue realized was £3542 (Rs. 35,420). The principles of the original project are sound, but mistakes of detail interfere with the success of the scheme. The fall of the canal hed is unduly slight and is irregular. Nowhere is the fall more than one foot in a mile and in many parts it is much less than a foot. The course of the canal is very roughly laid out. Sharp turns and corners are common, and there are long needless bends, unless indeed owners refused to let the canal pass through their lands. From Shringeri to Surleshvar not a work was made to carry the local drainage across the canal. In consequence silt deposits are unusually heavy, and nearly the whole of the water which reaches Surleshvar is carried through the A'lur branch which has a rapid fall. Only in heavy floods, perhaps for a few days twice a year, does the water find its way down the A'dur branch. Formerly all

villagers interested in the canal busied themselves once a year in a general and thorough silt clearing. This custom has gradually fallen into disuse. Where the system is so large and complex the principle of leaving the distribution of the water entirely to the people is open to grave objection. The villages on the higher reaches of the canal take an undue share of the water to the serious injury of those lower down. For some time inquiries have been made how far the whole work can be placed on a sounder footing, and a regular and just system of water distribution be introduced. The attention of the irrigation department has for some time been given to the improvement of the Dharma canal. A survey has been made of the main canal, and it is proposed to carry out works for its improvement and to bring it under proper control. The chief works would be regulating the fall by clearing obstructions, straightening the course in places, providing masonry escapes, and making the width more uniform. It is proposed to fix a regulator at the head-works, to provide proper outlets, and to introduce more system into the management of the canal.

Besides the Dharma canals there are two minor works of the same character; one for using the water of a stream running from the Nidsingi reservoir south to the Dharma at Kuntanhoshalli, and the other for using the water flowing through the valley south of Konankeri, and, by means of a channel made to connect numerous ponds, eventually to carry on the surplus water to the large Belgal reservoir. As regards the first or Nidsingi work, the stream passing near Bassapur was diverted to the Kurgudri reservoir by an embankment and deep cutting south of Bassapur. The original stream passes south and joins the Dharma at Kuntanhoshalli. Between the villages of Kurgudri and Satinhalli an uncient masonry weir across this stream feeds a small channel on the right bank, which waters the lands of Kuntanhoshalli. A mile below this weir stood an old dam from which the Savasgi lands were watered. This old dam was breached and ruined about forty years ago and the Savasgi lands lost this supply of water. To provide a remedy it was found more economical to rearrange the Kuntanhoshalli weir work so as to take off an irrigation channel from that weir on the left bank to the Savasgi lands, than to reconstruct the Savasgi weir itself. The work is now completed. The supply of water to the Kuntanhoshalli lands has also been improved by the new works. The Belgal Kalva as the channel is called which carries off the surplus water which gathered in a large valley south of Konankeri, connects a number of ponds from which, as each pond gets filled, the surplus water flows into the next, until it ends in the Belgal reservoir. This channel, which is about nino miles long, passes through the lands of Hankanhalli, Bamanhalli, Nellibid, Yelvatti, Talkerikop, and Gundur, and finishes at the Belgal reservoir. In many places are masonry outlets, whence rice lands lying between and not under the lakes are also watered. These outlets are said to have been an after-thought. The villagers of Belgal, who are the last to benefit by this channel, complain that in consequence of these outlets the water is taken for so many fields that the reservoirs do not fill as they used to, and the Belgal

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reservoir has lost a large supply of water. This channel was repaired and the new outlets made some years ago at the expense of the villagers.

According to the Collector's return for 1882-83 of 12,002 wells 3099 were step wells and 8903 were stepless wells. The average depth of a well varies from fifteen feet in Kod to a hundred and twenty feet in Navalgund. The cost of building a step well varies from £30 to £200 (Rs. 300 - 2000) and of building a stepless well from £7 10s. to £80 (Rs. 75 - 300). The following table shows the number of wells, their average depth, and the cost of building them:

Dhárwár Wells, 1882-83.

	-	Wr	LLS.		Cott.				
Sup-Division.	With	Steps.	Without Steps		With Steps.		Without Steps		
	Num- ber.	Aver- age depth.	Num- ber.	Aver- age depth.	Low- est.	High-	Low- est.	High- est.	
Dhārwār Hubli Hubli Asalgund Gadag Banlagur Rānebennur Hāngal Kamļar Kamļar Kalghatgi Ron	143 24 459 457 503 80 80 80	Fret. 25 63 120 40 25 40 20 44 15 41	1361 1194 311 821 • 093 440 1379 573 295 1670	Feel. 70 80 120 40 60 50 42 69 15 50	£ 50 50 50 50 50 50 50 50	£ 150 200 200 100 100 100 70 100 100	£ 10 15 20 10 10 10 71 10	400000000000000000000000000000000000000	

Navalgund and Ron which are badly placed for pond storage are also ill-suited for wells. The people are put to much inconvenience, not only because drinking water is scarce, but because it is bad, being charged with salt and lime. The supply of water in wells depends on reservoirs lying on a higher level from which the water soaks into the wells below. The wells in garden lands are nothing more than ponds of all sizes and shapes, and as they are not regularly built or surrounded with a parapet wall, the rains sweep much mud and filth into them, and unless they are regularly cleared they become choked and useless in a few years. These wells begin to be used about March, when, either from a scanty rainfall or from other causes, the pond supply begins to fail. When the water in the wells is on a level with or near the surface, two men scoop up the water by swinging a basket or guda through it. When the water is five or six feet below the surface the leather bag or mot is worked. As many of these wells are shallow and have no spring they dry as soon as the ponds.

MANURE.

The use of manure is generally understood. Except alluvial lands, all fields are more or less manured according to their wants. The garden lands are fully manured especially those growing the richer crops, which are manured with great care and with as much liberality as the husbandman can afford. Rice lands are freely manured and even the dry crops get a fair share. Waste lands, when brought under tillage, are not manured for the first year or two. In such cases the first crop sown is almost always Indian millet followed by

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a green or oilseed crop. If it seems to want it the land is manured before the third crop is grown. Black and good brown soils are manured once in three, four, or five years. They are naturally rich. and their vigour is renewed by the upper soil being always washed into cracks and the subsoil coming up for tillage. Red and poor brown soils are manured every second year and in some cases, if the husbandmen can afford it, every year. Sugarcane, rice, Indian millet, chillies, and rági want manure every year; sáve Panicum miliare, castor-oil, and uddu Phaseolus mungo want manure once in three years. On account of the labour and cost of carting the manure, fields more than a mile from the village are not manured oftener than once in three or four years. There are four methods of enriching the soil, the chief of which is mixed manure. This consists of cattle droppings, ashes, stubble, the shells of betelnuts, urine. and every form of rubbish which can be gathered. All this is stored in a pit near or in the husbandman's yard. The manure in the pit is occasionally covered by a thin layer of earth or house sweepings by which the volatile properties are kept from passing into the air. Some time before sowing, the manure is carted to the fields, piled in small heaps, spread on the field, and ploughed into the soil. In sowing Indian millet and other grains the poorer husbandmen mix the manure with the seed. As each husbandman has his manure pit, manure is not sold. An acre of garden land wants ten cartloads of manure of the nominal value of 5s. (Rs. 21), and an acre of rice or dry-crop land wants four cartloads nominally worth 2s. (Re. 1). The second way of manuring is by having the stubble, the cotton leaves, and the weeds eaten by sheep or goats. animals are known to leave their droppings on the ground the moment their rest is disturbed. The husbandmen contract with the shepherd that the sheep or goats shall not be allowed to rest more than an hour or two in one place, but be moved from time to time in the field. The urine and droppings are thus evenly spread over the whole field. When the finer-grained crops such as save Panicum miliare, and yellu Sesamum indicum are about to be sown the stubble is gathered in heaps and burnt on the field. The fourth way of enriching the soil is by green manuring. Black sesamum or guryellu is sown in late May or early June and is allowed to grow for three months when it flowers. It is then ploughed in and destroyed by the heavy hoe or kunti. This is considered sufficient manure for two years. In some places pond silt is spread on the fields, but silt is not so enriching as the other manures.

A two years' change of crop is held to be relief enough to the soil. In black soils cotton and Indian millet, as a rule, are sown alternately. In red soils Indian millet is followed by Italian millet, rági, sáve, chillies; or castor-oil, that is the change is from grain to green crops or from grain to oil-seeds. Oil-seeds are often used as a relief to the usual change of grain and green crops. The same crop is seldom sown in the same land for two successive years. chief exception to this rule is that grain may be sown in the same field for several years without a change if care is taken that a late crop succeeds an early crop. Thus the early millet may be succeeded

CHANGE.

Chapter IV. Agriculture. by the late parani Panicam italicum or wheat. Green and oil regulary also be grown for reveral years in succession if the repichanged, thus gram and califover may come after cotton or blest resamum. As the ware all late crops the roll has the banch of whole year during which it is termed more or loss deeply. With an average supply of rain good black oil yields a second crop, is the plain to get a second crop the early crop must be white second. Thus as reaped in the oil of August, when the coil is thoroughly ploughed or otherwise turned, and wheat or gram with an occurring row of calllower, lineed, or enter-oil are come. After the oil is manufed. There are therefore three modes of changing the crops A change of gram with green crops or oil plants, a change of all plants, a change of all plants with green crops, and a change of early with lone crops.

Pircu Tont'.

Dharwar field tools are like there and in the neighborries districts of Belgaum and Bijapur. A detailed description is given in the Belgaum Statistical Argumt. The chief field tools are the heavy plough or negali (K.), the light plough or radi (K.), the large hoe or kanti (K.), the leveller or Loreda (II.), the reed drill or Purgi (K.), the prubber or gadi I unti (K.) and the rickare or bigudli (K.). Both the heavy or negali (K.) plough and the light or mati (K.) plough consist of a thick log of word slaved by the village corpenter, with its lower end curving forward at na obtain augh from the main block. The share, which is an iron blade, eve and a half feet long by three to four inches broad and four to trelto pounds in weight, is let into a socker and fixed by a neorable imaring to the wooden point beyond which it juts about eix inches-The handle is fixed to the block by a thick rope presed along the beam and tied to the yoke, so that the strain of draught braces the different parts of the plough. The negati is a large, heavy, deepcutting plough, and is worked by two to six pairs of bullocks. Besides the ploughman, who is reldomable to keep the plough in anything like a straight line, it requires one to two men to drive the team. It costs £1 ds. to £1 12s. (Rs. 12-16) and as a rule is owned only by wealthy landholders who often lend it to their porret Except when the land is in very had order the uccali is nover used. It is very effective in loo-ening stiff land and a in approximy weeds. The ranti (K.) or light plough is of exactly the same make as the heavy plough. The only piece of iron about it is a narrow bar about nine inches long which serves the purpose of a share. It is worked by one pair of ballocks and costs about 4s. (Rs. 2). The ploughman manages it by himself as the roins of the bullocks come to the handle of the plough. In red and black soils the small plough is used before sowing to turn the soil; but, except cofton fields, good black soil often yields for several years without wanting oven the small plough. The large hoe or kunti (K.) is a rude tool. The chief part is a stout slightly crescent-shaped blade of iron about three feet long and four to five inches broad, fastened in stout' timbers with its cutting edge turned forward. The timbers are secured slopingly in a heavy beam of wood five feet long and one foot broad. The beam is joined to the yoke by two lighter pieces of wood and

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FIELD TOOLS.

from the upper surface of the beam rises the handle to which one end of a rope is tied and the rope is wound once round the lighter timbers in the middle, and is taken to the yoke and tied there. The large hoe costs about 10s. (Rs. 5) and is worked by four bullocks. To add weight a couple of boys generally sit on the beam, on each side of the handle, and are ready to clear stones stubble and other rubbish that may choke the hoe. Except in rice lands, in all lands where a plough is used before sowing, the large hoe or kunti follows the plough, breaks the larger clods, gathers the roots of weeds and of the last crop, and thoroughly loosens the In rich black soil, where for several years no ploughing is required before sowing, the large hoe is used to turn the soil. As land stiff and full of weeds requires the negali or heavy plough, so weedy stiff land requires a larger deep-cutting hoe called mági kunti (K.). A third small light hoe called ballesal kunti, is, in all soils, used after the kunti to level the surface and to cover seed sown by the seeddrill or kurgi. Besides the different hoes, a log called the korudo or leveller is used for breaking clods and smoothing the surface. The leveller is the log of a tree trunk split down the middle, scooped out and smoothed outside, and with two wooden pieces driven through it, on which the drag ropes and yoke are tied. When at work the driver stands on the leveller to give it weight. The seed-drill or kurgi is of two kinds, one for sowing grain and the other for sowing cotton. It consists of wooden beam with three to four wooden bills standing out at equal distances and armed with small iron tongues to make To each of these bills is fixed a bamboo tube whose upper end is joined to a hole in the bottom of a wooden cup which has as many diverging holes as there are tubes. It costs about 4s. (Rs. 2) and is worked by a pair of bullocks yoked in the same manner as in the light plough or the light hoe. The driver fills the cup with seed. In some villages the seed-drill has only three bills, which are wider apart than the four bills. When mixed grains are to be sown in one of the drills the driver plugs the cup hole for that drill and the seed is sown by a man who walks behind, and, from a clothful tied at his waist, drops seeds through a hollow bamboo called bulku which is tied to the seed-drill. The cotton seed drill is made on the same plan as the grain-sowing kurgi. It has only two bills eighteen inches apart and has no cups with holes. It is worked by a pair of bullocks yoked in the same way as in the grain drill. At the back of the beam of the seed-drill are tied by ropes two hollow bamboos or bukkus, which are kept in furrows drilled by the iron tongues of the bills, by two sowers, who from a clothful of seed at their waist drop the seed through them. The grubber or yadi kunti is used to clear grass and weeds between the rows of young crops. It also earths up the soil at the roots of young cotton plants. It consists of a beam two and a quarter feet long by six inches broad with two stays like the harrow. In the lower end of each stay a blade of iron is fixed horizontally to the beam. Two beams are generally worked by one pair of bullocks; and sometimes one pair of bullocks works three and in rare cases even four beams. Each beam is joined to the yoke by two stout bamboos, each fixed to the beam over each stay, and is guided by one man. It costs Chapter IV. Agriculture. Freed Tools,

2s. 6d. (Rs. 11). The pickaxe or baigudli has one end pointed and the other end bladed into a sharp adze. It is most effective in cutting and uprooting grass and other weeds after the land has been ploughed. It costs about 101d. (7 as.). Besides these field tools there are a weeding book or kurchegi worth about 9d. (6 as.), an axe or kudli worth 2s. (Re. 1), a sickle or kudyola worth about 2s. (Re. 1), a saw-sickle also called kudgolu worth 1s. to 2s. (Re. 1-1), and a spade or sulki worth about 2s. (Re. 1). Two carts are used for field purposes. The crop cart for bringing home field produce or carrying produce to market is about twelve feet long and three to four feet broad. The floor is made of two strong bars joined by four or more cross pieces at equal intervals. The wheels are of solid timber each of two or three pieces joined together and surrounded by a heavy iron tire two inches thick and nearly two inches broad. The wheels gradually thicken from the rim to the The axle tree, which is an iron cylinder, being considerably below the height of the bullocks, the floor is raised by a tongue resting on the axle. By this means, if the load is well balanced on the cart, the bullocks have comparatively little of the weight, and the draught, being on a level with their shoulders, is easier. From the axle run two poles to the ends of which the yoke is tied. With outriggers on both sides, the cart can carry a very great weight. It is rudely shaped and heavy; even when empty it is a hard pull for one pair of bullocks; when loaded it requires four to six voke of oxen. It costs \$1 to \$16 (Rs. 40-160). The manure cart differs from the crop-cart in having high sides made of tur stalks or bumboo matting. By removing the sides the manure cart is sometimes used for other purposes. They are drawn by two to three pairs of bullocks.

TILLAGE.

Except a few black soil fields owned by traders and moneylenders which are covered with grass and bushes, because they are let to men who have neither the means nor the heart to work them, till ge is corried on with care and labour. Except when they are thickly covered with hariali (M.), nat (K.), or karige (K.) grass, Cynodon dactylon, or, when the intended crop is cotton, black soils do not require a yearly ploughing. Ploughing instead of improving harms Indian millet, for if the fall of rain is heavy the black soil runs together and becomes too wet for the proper growth of This does not happon when the surface is the young plants. simply loosened by the large hop or kunti. Red soils require more tillage. The field should be ploughed twice, once lengthwise and once crosswise. When moist, red soils become light, friable, and easily worked. Two bullocks only are required to draw the plough, and the labour and expense are not much more than in hoeing black soil. Besides ploughing it is always necessary to use the large hoe once or twice to all kinds of soils before sowing, and, in the early stages of their growth, both Indian millet and cotton must be frequently hoed and cleaned. Cotton requires particular care. If grass and weeds are not constantly rooted out the young plants are stunted and the outturn is small.

Dharwar shares both in the south-west and in the north-east or Madras rains in a greater degree than any other

SLASONS,

Presidency. The south-west rains are most felt in the hilly and woody west, the north-east rains in the open east and north, and both about equally in the two southern sub-divisions of Kod and Ránebennur. The prevailing tillage in the west is wet chiefly of early or mungari crops; in the east the tillage is dry chiefly of late or hingári crops. In Kod and part of Ranebennur, which share in both rains and have both dry and wet tillage, entire failure of crops from drought is unknown, though it often happens that the rainfall favours one kind of tillago more than another. No rainfall can well be too heavy for rice when once it is well above ground; while too much rain harms dry-crop tillage. On the other hand the rainfall which is most suitable for dry-crop tillage is not all that can be desired for rice. The husbandman's year of 365 days is divided into twentyseven lunar asterisms or star-chambers. These are Ashvini of fourteen days from the 11th to the 24th of April; Bharni of fourteen days from the 25th of April to the 8th of May; Kritika of fifteen days from the 9th of May to the 22nd of May; Rohini of thirteen days from the 23rd of May to the fourth of June; Mrigshirshe of fifteen days from the 5th to the 19th of June; A'rdi of fourteen days from the 20th of June to the 3rd of July; Punarvasu of fourteen days from the 4th to the 17th of July; Pushya of fourteen days from the 18th to the 31st of July; A'shlesha of fourteen days from the 1st to the 14th of August; Maghe of thirteen days from the 15th to the 27th of August; Hubbe of fourteen days from the 28th of August to the 10th of September; Uttara of fourteen days from the 11th to the 24th of September; Hastu of thirteen days from the 25th of September to the 7th of October; Ohette of fourteen days from the 8th to the 21st of October; Svati of thirteen days from the 22nd of October to the 3rd of November; Vishákhe of thirteen days from the 4th to the 16th of November; A'nurádhi of thirteen days from the 17th to the 29th of November; Jeshtha of thirteen days from the 30th of November to the 12th of December; Mul of fourteen days from the 13th to the 26th of December; Purváshádha of thirteen days from the 27th of December to the 8th of January; Uttráshádha of thirteen days from the 9th to the 21st of January; Shravana of thirteen days from the 22nd of January to the 3rd of February; Dhanishte of thirteen days from the 4th to the 16th of February; Shutatare of thirteen days from the 17th of February to the first of March; Purvábhádre of fourteen days from the 2nd to the 15th of March; Uttrábhádre of twelve days from the 16th to the 27th of March; and Revati of thirteen days from the 28th of March to the 10th of April. Seven of these between Kratika and A'shlesha, that is between the 9th of May and the 14th of August, form the early or mungari season; six between Maghe and Sváti, that is between the 15th of August and the 3rd of November, form the late or hingári season; eleven between Hastu and Shravana, that is between the 25th of September and the 3rd of February, form the harvesting season; and seven between Uttarásháda and Revati that is between the 9th of January and the 10th of April form the cotton-picking season. The normal Dhárwár rainfall may be divided into three periods.

The first lasts from the middle of April to the end of the first week

Chapter IV. Agriculture. Seasons. Chapter IV. Agriculture. Seasons. in June. Every ten or fifteen days in these six weeks should have a heavy easterly thunderstorm with half an inch to two inches of These falls are wanted for the western rice lands that the rice may be sown before the end of May. East of Hubli these showers have no special use as the black soil grows no rice, and no crops are sown before the end of June or the beginning of July. The next period is the south-west monsoon, which lasts from the middle of June till the middle or end of September. The monsoon should begin with about a week of heavy showers lasting some hours every day to soak all land intended for early jvári or rági. After a week's rain should come a nearly fair week that field work may be pressed on. The first sowings of jvári should take place in early July. The whole of July should be wet, with few entirely dry days. August is generally a dry month, with as a rule not more than two to three inches of rain. These August showers moisten the surface of the eastern plain and prepare it for the sowing of late or white jvári and cotton. The date of sowing white millet and cotton varies with the rainfall from the middle of August to the middle or even the end of September. Wheat mixed with linseed or safflower is sown still later. September should be moderately wet with many fine days. The harvest depends on October more than on any other month. October is also the month of most uncertain rainfall. If no rain falls in October, as was the case in 1876, the cotton, the late ivári, and the wheat are entirely lost. If unusually heavy rain falls in October, as fell in October 1877, the early ivári ears sprout. The whole of the October rainfall is from the east. It is not steady rain, but comes in sudden and heavy downpours which last an hour or two. The whole October rainfall should be about six inches, half an inch to two inches falling in one heavy plump every few days. This gives all the moisture which the cotton, wheat, and later juári require. After October the less rain that falls the better both for harvesting the early juári crop and for the health of the growing cotton wheat and other late crops. December and January seldom pass without a few days often of heavy rain. In the east heavy December and January rain mildews the wheat; in the west heavy December and January rain does little harm as the rice and early judri are harvested in November and early December.1

CROPS.

In 1881-82 of 1,507,942 acres the whole area held for tillage, 184,776 acres or 12:25 per cent were fallow or under grass. Of the remaining 1,328,166 acres, 1661 were twice cropped. Of the 1,324,827 acres under tillage, grain crops occupied 756,034 acres or 57:06 per cent of which 389,411 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, 174,827 under wheat godhi (K.) or ghau (M.) Triticum estivum, 35,117 under rice bhatta (K.) or bhát (M.) Oryza sativa, 47,830 under navani (K.) or káng (M.) Panicum italicum, 28,859 under rági (K.) or nochni (M.) Eleusine corocana, 17,911 under sáve (K.) or vari (M.) Panicum miliare, 4099 under spiked millet sejje (K.) or bájri (M.) Penicillaria spicata, one under

¹ Mr. F. L. Charles, C.S., in the Famine Commission Report, 14-15.

maize mekke jola (K.) or makai (M.) Zea mays, and 7977 under other grains of which details are not given. Pulses occupied 101,197 acres or 7.63 per cent, of which 33,035 were under gram kadli (K.) or harbhara (M.) Cicer arietinum, 25,575 under togari or tuvari (K.) or tur (M.) Cajanus indicus, 21,200 under hurli (K.) or kulthi (M.) Dolichos biflorus, 14,760 under hesaru (K.) or mug (M.) Phaseolus radiatus, 426 under uddu (K.) or udid (M.) Phaseolus mungo, and 3201 under other pulses. Oilseeds occupied 70,426 acres or 5:31 per cent, of which 14,734 were under linseed agashi (K.) or javas (M.) Linum usitatissimum, 3694 under sesamum yellu (K.) or til (M.) Sesamum indicum, 41 under Indian mustard sasire (K) or rái (M.) Sinapis dichetoma, and 48,957 under other oilseeds. Fibres occupied 359,210 acres or 27.11 per cent, of which 357,701 were under cotton hatti or arale (K.) or kapus (M.) Gossypium herbaceum, 1222 under Bombay hemp sanbu (K.) or tag (M.) Crotalaria juncea, and 287 under Indian hemp pundi (K.) or ambadi (M.) Hibiscus canuabinus. Miscellaneous crops occupied 37,960 acres or 2.86 per cent, of which 28,748 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 3742 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, 1251 under tobacco hage soppu (K.) or tambáku (M.) Nicotiana tabacum, seven under ginger shunti (K.) alla (M.) Zinziber officinale, and the remaining 4212 under

various vegetables and fruits. The following are the details of some of the most important crops: Indian Millet, jola (K.) jvári (M.) Sorghum vulgaro, with in 1881-82, 389,411 acres or 29.39 per cent of the tillage area, is the most widely grown crop in the district, the grain forming the husbandman's chief food and the straw supplying the best cattle fodder. In good black soil free from weeds for Indian millet the land is treated in the same way as for cotton. Red soils must be manured and ploughed before the leveller or korudu is used. fewer than eighteen varieties of Indian millet are grown in Dharwar. Of these two bili jola (K.) and kari-goni jola (K.), the finest of the whole are late or hinguri crops. The remaining sixteen are mungári or early varieties. Of the sixteen early varieties six, murlinjola, dhodajola, utal-phulgara, chrjkara, kagi-jola and nandihál are sown as regular crops, never as occasional rows among other crops; a seventh variety bhagrant phulgara is sown both as a single crop and in rows among another crop. All of these seven mature in three to four months. The seven other varieties patansáli, gavri kulu or kulmudumugu, basvanpadu, phulgara, jelkonjola jogi-jedi-jola, ken-jola, and kodmukanjola are, except kodmukanjola, sometimes sown as regular crops but usually as occasional rows in fields of narani Panicum italicum or rági Elousine corocana. Jelkanjolu does so well as an occasional row crop that it has the special name of ukkudi jola, ukkudi meaning an occasional row. When sown with late crops all of these soven are intended only to supply cattle with green fodder. The two romaining varieties halmakan-jola and alkanjola are mixed with some of the above varieties before they are sown. These two may be eaten roasted; they are never made into bread. The early or mungári kinds are sown in July and August, and are reaped from October to Chapter IV. Agriculture. CROPS.

Indian Millet.

Chapter VI. Agriculture. Chors. December. Along with the early Indian millet generally in every fourth row or drill, are sown cajan pea hurli or Dolichos biflorus and mataki or Phaseolus aconitifolius which thrive with the same preparation of soil as the millets. The late or hingari Indian millets are sown in October, and reaped in February and March. With them are sown occasional rows of safflower gram and linseed. Unless the ground is well manured Indian millet is not sown in the same field for two successive years; the second crop is either cotton, wheat, gram, or safflower.

DISTRICTS.

Rági,

 $R_{A}'GI(K.)$ or $n\acute{a}chni(M.)$ Eleusine corocana, with 28,859 acres or 2.17 cent of the tillage area, is grown both in red and black soils, but generally in the red soils of the hilly west. Of two kinds of rugi both are sown in June after the first burst of the south-west monsoon, and reaped one kind in October and the other in December. In preparing red soil for ragi the ground is ploughed with the large plough and is afterwards broken and levelled. Manure, at the rate of one or two cart-loads an acre, is laid in heaps at equal distances, and the seed is thoroughly mixed in the manure. Furrows are cut with the small plough, the sower following the plough with a basket full of mixed manure and seed which he drops in the furrow, his basket being kept full by a man who walks to and from the heap. When the sowing is over the leveller or korudu breaks the clods and covers the seed, the light hoe or ballesal kunti is passed over the surface, and is once more followed by the leveller. Along with ragin little mustard and the variety of Indian millet known as ukkadi-jola are sometimes sown. At intervals a row of cajan pea is drilled in. five years ago (1848) when wood-ash or kumri tillage prevailed, rági and sáve were planted in forest clearings. In these clearings no manure but the ashes of cut underwood were used. The same clearing only yielded a crop two years in succession when the ground was left fallow till the underwood had grown high enough to be again burnt.

Save

SA'VE (K.) or vari (M.) Panicum miliare with 17,911 acres or 1.35 per cent of the tillage area, is grown in the same way as ragi. Of two varieties, one, muligi save is sown in June after the first burst of the south-west monsoon, and reaped in September; the other is sown from the 1st to the 15th of September and reaped in late December. Muligi save or early panic is seldom grown in the western forest villages, because, as it ripens before any other grain it has to bear the whole attacks of the wild hogs which infest those parts, and it is not valuable enough to make it worth watching.

Wheat.

Wheat godhi (K.) or ghau (M.) Triticum æstivum, with in 1881-82 174,829 acres or 15·19 per cent of the tillage area, is grown chiefly in Navalgund, Gadag, Hubli, Ron, and Dhárwár. It does not thrive well in Bankápur. The three chief varieties of wheat are the red or támbda, the local or juári apparently meaning Karnátak, and the deshi also local apparently meaning Deccan. Of these the red is the finest and is much like English wheat. Wheat is the last sown of the cold weather crops. It is not sown till the October rains are over, and there is no chance of more rain. Wheat is generally grown in good soft black soil which has been thoroughly broken by the large plough followed by

the heavy hoe or kunti and the light hoe or ballesal kunti. Twenty-four to forty pounds of seed an acre are sown through the seed drill and the soil is again worked with the light hoe. After this it wants no weeding or other care. Wheat is grown every third year, and is followed by Indian millet. In some places wheat alternates with sugarcano and gram and occasionally safflower is raised between the rows of wheat two to six feet apart. Safflower does not ripen till a month after the wheat and does not interfere with its growth. wheat crop takes three to three and a half months to ripen. Towards the end of December it should have one good shower. scedlings are about a month old they are apt to suffer from rain or dew, and from a disease called bhandar which is caused by westerly winds. Southerly winds are also unwholesome. Excessively cold breezes bring on a disease called ittangi (K.) which makes the wheat plants turn reddish and bear poor or no ears. The acre outturn is said to vary from 60 to 300 pounds and to average about 200 pounds. The average wholesale rupee price of wheat is about thirty pounds. Wheat is not the staple food of the people of the district. It is used only by the rich and the well-to-do. In the south of the district a little wheat is brought from Kumta in North Kanara. Of the local wheat some is sent to Belgaum. At present (1884) the cost of carriage to Belári, the nearest railway station, is about £2 8s. (Rs. 24) the ton.

RICE bhatta (K.) or bhát (M.) Oryza sativa, with 85,117 acres or 6.42 per cent of the tillage area, is grown almost wholly in the woody west which is locally called malladu or hill land. Rice wants much and constant moisture. When it depends on rainfall alone rice is always uncertain, but this element of chance rather fascinates the people. Most rice land is independent of simple rainfall for its watersupply. The lowlying lands are watered from ponds and much is also watered by drainage from neighbouring high grounds guided by water-courses or kalvás. Failing pond water irrigation is supplied from wells or more commonly from holes fed by underground soakage from ponds. The rice soil is red towards the extreme west, and further east it is a light coloured clayey mould. This clayey soil, by the action of water, tillage, and weather, becomes stiff, compact, and very retentive of moisture. This kind of rice soil is poor, middling, or good according to its situation. In high and exposed sites it is poor and shallow, even with care and manure able to bear only one crop of poor rice; in middle situations neither very high nor very low it is middling, of some depth, and where there is moisture enough, yields two crops, one of rice and the other of pulse; in low lands or valleys it is of superior richness, of a rich dark brown, and yields excellent after-crops. Regular rice fields are divided into level compartments a few feet to fifteen or twenty yards broad and varying in length according to the landholder's pleasure or the position of the ground. The slope of the ground or hill side is generally carried into a series of terraces each one or two feet higher than the one immediately below it, and the front of each is guarded or raised by a foot high embankment forming part of the descending step. The effect of a hill or rising ground terraced in rice plots is extremely pleasing. The three kinds of rice-land require almost the same labour. After harvest the poor soil seldom holds Chapter VI.
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moisture enough to allow of its being ploughed; middle class soil even when not moist enough to yield an after-crop, is always damp enough to be ploughed, and the ploughing is a gain as it makes the land more ready to receive the occasional dry-season showers. The upturned grass and stubble roots die and rot, and the stiff clods crumble in the heat and air. At the end of March manure is laid in heaps. In early April the clods are broken by the leveller or korudu, or, if still very hard, by labourers with clubs. In fields which have not been ploughed after harvest nothing, except the laying of manure, can be done till the first rains of late April or May, when the field is ploughed and the clods are broken by the mallet. The manure is then scattered broadcast from a basket, the surface is turned by the heavy hoe or kunti and the leveller or koruda follows. Nothing further is done till rain enough falls to admit of sowing for which a small seed-drill or kurgi is generally used. An acre of rice land on an average wants three to five loads of manure If more is laid on, and the rains are abundant the crop will gain greatly; but with light main in highly manured land the crop will grow too freely and will probably dry without coming to car. From the 25th of May to the end of June, as soon as the village astrologer has fixed the lucky day, the seed drill is decked with green leaves, the husbandman bows before it, and sowing begins. The drill is closely followed by the balle-sal-kunti or light hoe to cover the seed, and the korudu follows to level the surface. In about eight days the seed sprouts, and in eight days more weeding begins with the yadi kunti or grubber and is repeated generally once in ten or twelve days. In two months the seed drill is used for weeding, as the crop is too high and the fields are too full of water for the grubber. The weeds are always left to rot where they grew, and this constant supply of vegetable matter is one chief cause of the peculiar richness of the soil. The surrounding ridges are repaired, the earth cut from the front is heaped on the ridges, the beds are filled with water, and the leveller is passed over the crop. This gives the soil a smooth and beaten surface into which the water does not readily sink, but remains in pools.

The rice harvest begins about the 15th of November in the drier land, but many hollows where water lies deep are seldom ready for reaping before the end of December. An unusually dry or wet season may hesten or delay the harvest a fortnight either way. When rice is reaped it is left to dry on the field. It is then tied in sheaves, built ears outwards in a stock, and left to season for a month. A pole is fixed in the field, and the ground for a few yards round the pole is beaten hard and cowdunged to prevent cracks. The floor is cleaned and swept, and the loosened shenves are scattered over it, and six or eight muzzled bullocks packed side by side in a line are slowly driven over the sheaves round the pole. This goes on till all the grain has been trodden from the straw. The straw is then removed, and fresh sheaves are laid and trodden. Winnowing follows thrashing. Rice is winnowed by filling with grain a flat basket which is raised at arm's length and slowly emptied into the air with a slight and regular shake. The winnewing wind blows aside the dust and the leaves, and the clean heavy grain falls on the ground. When a heap

has been collected the grain is carried to the village, the outer husk is removed by a wooden hand-mill or tolulikalu (K.) and as before is a second time winnowed. When the operations are over, the rice is stored in a large round basket or wattle-and-daub safe, raised a little from the ground on beams laid across large stones, and roofed with thatch. Every husbandman's house has one grain basket in which rice and almost all other grains are stored. The only grains which are generally stored in pits are Indian millet, wheat, gram, and cajan pea. Nine chief kinds of rice are grown in Dharwar. Of these two, ámbemori and konksáli sanbhatta are of good quality, three bedarsáli, somsáli, and hakkalsáli are of medium quality, and four dodigan a large grained variety, hempgan or red, herekgan or black, and gensáli are of poor quality. All are sown at the same time, and are reaped one after the other at short intervals. In a fair proportion of rice fields sugarcane is grown once every third year. Where the soil has good natural moisture sugarcane is grown without watering, and, where the water supply is plentiful, with as much watering as may be necessary. The only cane which is grown without any irrigation, except a single flooding of the land when it is planted, is the small grass cane which is locally known as hol-kabbu. The cane which does not succeed without occasional watering during the dry season is the large or garden cane locally known as gabras dali. Green crops of mug, pávta, matki, and gram are also grown after rice in hollows which hold their damp till late in the year. Except in red and light coloured soils, a second crop of cane is seldom grown without watering.

Tobaccol háge soppu (K.) or tambáku (M.) Nicotiana tabacum, with 1251 acres or 0.09 per cent of the tillage area is found chiefly in Ránebennur, Dhárwár, and Ron. Tobacco is seldom grown near the western forests, as the red gravelly soil does not suit it. It is chiefly raised in the east light-black soil. Rich alluvial soil is preferred, though, when watered, a mixture of red and black soil is found very suitable. The site of the tobacco field should be near the village as there it is more easily manured and guarded. Much less tobacco is grown than might be grown. Lingáyats, at least Lingáyats who have children, dislike growing tobacco, for they have to cut the young shoots and this sin is apt to bring sickness on the family. In June the seed is sown carefully in prepared beds. If the season is early, the seedlings are ready for planting in August; if the season is late they are ready in September. The field must be richly dressed with mixed pit manure. The leaves are ready for cutting in December or January. As a rule the whole plants are cut, stem as well as leaves. In most cases a poor second growth comes from the root and this second crop is allowed to flower and its seed is saved. The average acre yield varies from about three hundred pounds in Dhárwár, to two hundred pounds in Ron. At four pounds the rupee this leaves

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¹ From Mr. E. P. Robertson's letter 3261 of 20th September 1873 to the Revenue Commissioner S. D.

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Tobacco.

the husbandman a net acre profit of £4 to £6 (Rs. 40-60). The quality of the tobacco is not good; much of the home market is supplied from tobacco brought for sale from the banks of the Krishna. Tobacco is cured in three slightly varying ways. The stems, when cut are split, and for four to seven days are left in the field to dry. If there is dew they are left alone, if there is no dew they are sprinkled with water, or, in some cases, with a decoction of kavási hallu grass, catechu, and coarse sugar or jágri. The stems are buried four or five days, taken up during the cool of the day, dried, sorted, and tied for final disposal. The same plan is adopted if the leaves are plucked from the stem. In some places after the plants are cut they are left in the field for eight days, tied in bundles of twenty to twenty-eight, and carried home. They are piled in heaps with the leaves inward, and covered with matting to keep off wind and rain. After about a fortnight the mats are taken away, the tobacco is aired for a day, and heaped as before. This process is repeated four times when the tobacco is considered cured, and is sorted and tied into bundles. According to the third process after the leaves have been cut they are exposed to dew for ten or fifteen days, and if there is no dew the leaves are watered. The leaves are then fairly dried and buried with two layers of leaves and one layer of earth. After three days they are taken in the cool of the day and spread outside of the house. Two days later they are tied into bundles which are turned every eight days. At the end of a month the tobacco is cured. If tobacco is cut before it is ripe or if it has been over-fermented in curing it is apt to be attacked by insects. In 1872 Mr. E.P. Robertson, then Collector of Dhárwár, tried to introduce both Hayana and Shiraz tobacco. The seed of these two exotics was sown in eightyseven villages of which twenty-two belonged to Ron, thirteen to Gadag, twelve to Ránebennur, eleven to Karajgi and Sávanur, eight to Hubli, six to Kod, and four to Dharwar. In some of the villages in which the seed was planted the crops withered from want of rain, but in many the crops came to maturity. In every case the husbandmen were pleased with the tobacco. Compared with the local tobacco it had much larger leaves, the crop was twenty-five per cent heavier, it was of a stronger and better flavour, and it fetched a higher price. Mr. Robertson doubted (1873) if the foreign tobacco could ever be well enough cured for the English market.

Sugarcanc.

Sugarcane kabbu (K). or us (M.) Saccharum officinarum, with 3742 acres or 0.28 per cent of the tillage area, is chiefly grown in the damp west or malladu and occasionally in gardens in the dry east. Except that when it is grown in a field it is planted in a field from which rice has been reaped, the garden and field tillage of sugarcane are much the same. The chief point is that the land must be damp onough. In December before the cane is planted the ground is prepared by breaking and levelling the rice-field ridges. After a week the small plough or ranti, with two or more pairs of bullocks, is drawn three or four times across the ground. The clods are broken by the korudu or leveller, and in January the heavy hoe or kunti and the light hoe or ballesal kunti are used to powder and level the surface. Manure is laid in heaps,

and, towards the end of January, the large plough cuts the surface into furrows about eighteen inches apart. In February, and in some places in March, the cane cuttings are laid in the furrow and covered with manure. Sugarcane wants more manure than any other crop; in fact cane can hardly have too much manure. Six to nine cart-loads are generally given to the acre. After the cuttings are covered with manure the small plough or ranti is run along the side of the furrows and fills them with earth. The field is then once well watered and wants nothing more till the rains. Eight or ten days after the planting, when the surface is dry, the korudu is used to level it and break the clods. The small plough is again used to heap the earth on the cane and is again followed by the korudu. After a few days the surface is loosened by the smaller hoe or bulleral kunti to help out the young sprouts and destroy the weeds. Nothing further is done till the first showers fall, when the crop is a few inches above the surface and the field is weeded by the grubber or yadi kunti. Now, if not earlier, it is hedged, and weeded as often as wanted, at first with the yadi kunti and later with the kurgi or drill machine. The earth is heaped about the roots, and the crop is ready for cutting in light porous soils in cloven months and in stiff soils in thirteen or fourteen months. Of eight varieties of sugarcane the chief are hal kabbu, rómrasdali, gabrasdali, and kara kabbu. The hal kabhu or grass cane, though the smallest variety, is considered the finest. It is white and thin, about the thickness of a good sized millet stalk. It is sown in rice fields and is considered a hardy plant. It is very largely grown because it has several advantages over the other varieties. It wants less water than the large white and red kinds. After it has once fairly taken root, little watering is required, the rain alone proving nearly enough. Though the larger cano gives much more juice it has much less saccharine matter in proportion than the small cane, and requires far more boiling to make gur or coarse sugar. The gur made from the small cane is also considered of superior quality. The gur of the small cane is light and granulated, while that of the large cano is heavy wiry and of a somowhat darker colour. On account of its hard bamboo-like texture the small cane is much less subject to the attacks of jackals and wild cats than the large cane. To sow an acro of hal kabbu requires 2500 to 3000 cuttings at three cuttings a cane. The ramrasdali cane is streaked white and red and is sown in rice fields as well as in gardens. It grows to a fair height and thickness, and an acre yields about ten loads of inferior jagri, from which no sugar is made. The gabrasdali is grown in small quantities in gardon lands for local use, and wants care and water once a fortnight. The skin of this cane is remarkably thin, the knots are far apart, and it is very juicy. It is much like the Mauritius cane. For an acre of gabrasdali or ramrasdali 5000 cuttings at five cuttings a cane are required. The karra kabbu is the common red The other four minor varieties are the Mauritius or morishyáda-kabbu, dodiya, byatalldodiya, and bile kubbu. Mauritius cane yields juice superior to that of the common cane,

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but, as it wants more water, and is more liable to be gnawed and eaten by jackals and porcupines its growth is limited. Sugarcano takes more out of the ground than any other crop. In fields augureane is followed by rice and in gardens by pot herbs. Unless the ground is richly manured, vegetables do not yield much during the first season after sugarcane. It is not till the second or third year that sugarcane can be again grown with advantage. In a fair season, on a rough estimate, an acre of sugarcane will bring a net return of £1 12s. (Rs.16). Jagri or coarse sugar is made in a press of two upright solid wooden cylinders, on one of which is ent an endless male screw and on the other an endless female screw. These are set in pivots cut in a strong plank which is fixed at one edge of the bottom of a pit. The male screw cylinder is about a foot higher than the female, and into its head a horizontal bar is let to which are yoked two or more pairs of bullocks who keep the machine constantly moving. The cylinders are fed with pieces of cane about a foot long. Hal kabbu canes are passed once and ramrasdali canes are passed twice through the cylinders. pressed from the cane runs into a trough, which forms the base of the machine, and from the trough passes into a broadmouthed earthen pot which is buried in the ground. When enough is gathered, it is carried to the boiler, a large flat iron vessel costing £1 12s, to £4 (Rs.16-40). The boiler is set on a brisk fire and is fed by the dried cane rinds. The boiling juice is constantly stirred, and the thick soun that rises to the surface is carefully removed till it becomes like syrup, when it is poured, if required for coarse sugar or jugar into holes dug in the ground and after cooling is cut into cakes or dug out whole. If it is wanted for fine sugar, the syrup, after it is taken from the oven, is briskly thrown up the sides of the iron vessel by two or three men with long flat wooden ladles till it cools, and is finally broken into powder by oblong or oval-shaped single or double handled wooden blocks.

Chillies.

CHILLES, menasinakai (K.) or mirchi (M.) Capsicum frutescens, with 28,748 acres or 2.16 per cent of the tillage area, is grown chiefly in the country between the woody west and the open east. The climate and the rich or marikat soil of Kod are particularly suited to the growth The chilly is sown in May or early June in a small of chillies. carefully prepared plot, often the backyard of the husbandman's house, and is well watered. In July, when of some little height, the plants are moved to the field, and are there set in rows two feet apart, which are laid out with the utmost regularity and precision-After the field has been planted, manure is applied by the hand to the root of each plant, and, at intervals of eight to ten days, the small two-bullock plough is carefully passed between the rows of plants, first lengthwise and afterwards across, by which the field is kept free of weeds, and, to keep the roots cool the earth is heaned round each plant. This earth-hoaping is repeated for about three months until the branches of neighbouring plants begin to touch and the fruit appears. In December and January the crop is picked by the hand, generally in two pickings of which the first is

by far the largest. A good crop is said to yield about 400 pounds (16 mans) the acre which occasionally sells at about a penny a pound (Re.1 a man), a price which pays the husbandman excellently. The price is subject to very sudden changes. The chilly is used as a seasoning and though only very small quantities are required, a certain amount must be had at any cost. Thus in seasons of short crops the price rules very high, and, when the crops are large, the chilly becomes a glut and the price falls so low that short years sometimes pay better than full years. When grown as a garden crop the chilly is frequently mixed with the early watered bellulli or garlic and ullegaddi or onion.

Cotton, hatti (K.) or kápus (M.) Gossypium herbaceum, averaging 335,900 acres or about twenty-seven per cent of the tillage area, is the most important crop of the Dharwar black soil plain.2 Little cotton is grown either in the hilly and woody west or in the patches of stony and hilly ground in the eastern plain. Three kinds of cotton are grown in Dhárwár: Gossypium arboreum devkápus (K.) (M.) that is God's Cotton, used in making sacred threads and temple lampwicks; Gossypium indicum jvári-hatti (K.) that is country cotton; and Gossypium barbadense viláyati-hatti that is American cotton. Of these three kinds Gossypium arboroum, a perennial bush eight to twelve feet high is grown occasionally all over the district, in gardens, beside wells and streams, and near temples. It is much like the Brazilian or Peruvian cotton plant, and, though this is unlikely, it is often said to be an American exotic. Gossypium indicum, jvári-hatti, generally known in the Bombay market as Kumta cotton, is largely planted all over the black-soil plain, Gossypium barbadense vilúyati-hatti that is American cotton. commonly called Sawginned Dharwar, which was introduced into the district by Government in 1842, has thriven well and has come to occupy about a quarter of the district cotton area. Among the cotton producing districts of the Bombay Karnátak, Dhárwár stands first, and both its American and its local cotton are highly esteemed. All evidence goes to show that with fair treatment in preparing thom for market, the two varieties grown in Dharwar will rank among the best cottons of India.

The upland plain of Dhárwár enjoys the unusual advantage of two rainy seasons, the south-west between June and October and the north-east or Madras between October and December. north-east rains give the country a fresh supply of moisture in October and often again in November, and in a small degree still later on. This moisture with the cool November nights has had a large share in successfully acclimatizing New Orleans cotton. In the Dharwar cotton plains the yearly rainfall ranges from twenty-five to thirty inches. During the cotton-growing months,

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> Crors. Chillies.

COTTON.

Climate.

¹ This account of Dharwar cotton is prepared from a pamphlet written by Mr.

This account of Dharwar cotton is prepared from a pamphiet written by Mr. W. Walton, late Cotton Inspector of the Southern Martha Country.

The area in the text is the average for the five years ending 1882-83. In 1881-82 the sub-divisional areas were, Gadag 79,537 acres, Navalgund 67,866, Ron 67,105, Hubh 44,865, Karajgi 30,497, Ranebennur 22,777, Bankapur 22,464, Dhárwár 13,069, Hángal 5668, Kod 3100, and Kalghatgi 753 acres. In 1881-82 the cotton area in Government and alienated villages was 534,000 acres; see below p. 302.

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Soil.

that is from September to February, the returns for the five years ending 1882 show a greatest heat of 97° in February and a least heat of 58° in December. For cotton to thrive the soil should be loose and open enough to allow the air and sun to pass below the surface, and still more to let excessive and untimely rain drain from the roots. These qualities the crumbling gaping soil of Dharwar has in an unusual degree.1 The Dharwar husbandmen describe their cotton lands as of two kinds: huluk-yeri which is a mixture of black and red soil and yeri a pure black soil. Both local and American cotton are planted in both these soils, but huluk-yeri or black and red is generally considered best for New Orleans cotton, and veri or pure black for local cotton. The black and red is considered the richer of the two, but, in a bad season, blight and other diseases show themselves sooner and to a greater extent in black and red than in pure black. The great merit of these two soils is the surprising length of time during which the under-soil keeps moist. It is this under-ground dampness that enables the cotton plant, especially the American plant, to mature as late as March and April. When the surface of the field is baked and gaping with the heat the cotton bushes are still green because their tap roots are down in the cool moist under-soil. Cotton is seldom grown in red soil; the ontturn is too small to pay at ordinary prices.

Watering.

Watering has often been suggested for Dharwar cotton. Mr. Channing, one of the American planters brought by Government in 1842, recommended the damming of different parts of the Malprabha for the purpose of storing water to water the cotton fields. In 1865 the river was examined by the Collector and by Sir Bartle Frere, then Governor of Bombay, when on tour. The matter was referred to the irrigation department, but the costliness of the scheme prevented its being undertaken. Another scheme was to draw a supply of water from the Varda river; but the Varda scheme also proved impossible. Though both of these schemes were given up, the question whether watering the black soil cotton fields does good or does harm to the crop is still unsettled. The weight of experiments is against watering cotton in black soils. In 1858, experiments made on the Dharwar border showed that, even with the help of water, cotton could not be profitably grown in red soils, and that in black soil watering positively injured the crop. Dr. Forbes-Royle, the superintendent of the Dharwar ginning factory (1855), was of opinion that watering would be of use only in case of the failure of rain. Mr. W. Shearer, the superintendent of cotton experiments (1867-75), when want of rain threatened to destroy his crop, endeavoured to save it by watering. The only result was an improvement in the look of the plants. The watered plants yielded no more cotton than the unwatered plants, and the staple of the watered plants was exceptionally weak. So far

¹ An analysis of the best cotton soil showed in 4500 grains, 3324 grains of very fine soil, 936 grains of impalpable powder, and 240 grains of coarse pobbles like jasper, with pieces like burnt tiles strongly rotentive of moisture. The impalpable portion consisted of 18:000 grains of water, 0:450 of organic matter, 0:033 of chloride of sodium, 0:007 of sulphate of lime, 0:027 of phosphate of lime, 0:050 of carbonate of lime, 0:013 of carbonate of magnesia, 15:200 of peroxide of iron, 16:500 of allumins, 0:035 of potash, 48:000 of silica combined and free as sand, and 1:185 loss; total 100:000

as Mr. Shearer's experience went, the only effect of watering either American or local cotton was to develop the plant at the expense of The late Colonel Meadows Taylor, C.S.I., made the fibre. experiments in watering Dharwar-American cotton, and the result was a failure. The leaves were curled, the bolls soft, and the fibre weak. He agreed with Mr. Inverarity, then Collector of Broach, that watering cotton in deep black soil would prove injurious both to the quality and to the quantity of the fibre. The black or regur soil. in which cotton is almost always grown, is very deep and moistureholding. Though the surface seems dry, and no doubt is dry as far as the plough or hee has disturbed it, yet, after an ordinary rainfall, the under-soil always keeps moist, not only beyond the time at which cotton ripens, but even during the whole of the hot weather. The roots of the cotton plant strike very deep. The tap root passes at least two feet below the surface, generally three to four feet, sometimes as much as eight feet. Even the side shoots pass down when they find the surface soil begin to dry. A certain dryness in the soil is apparently needed to bring the fibre to perfection and to cause the bolls to open. Colonel Taylor thought that in deep black soil the ordinary rainfall was enough for the plant. Its whole growth, and for the most part its buds and flowers and green bolls were produced while the subsoil was wet. As the soil dried the stom of the cotton plant stiffened, the bolls hardened and ripened, and the cotton burst forth. If the ground was kept damp, there would be a danger that the plant would throw out fresh shoots and fail to ripen the bolls.

Cotton takes much out of the soil. Unless he is tempted by high prices, the Dharwar landholder does not grow cotton oftener than once in three years. Still as it commands a sure and profitable market, cotton is often sown every second year, and in some of the richest soils it is grown season after season. Where it is planted season after season the crop is poor and the soil is much weakened. The area under local or Kumta cotton varies year after year with the labour market, that is with the quantity of labour forthcoming for cleaning. Thus, if labour is scarce and dear and the farmers find they have a large balance of unginned native cotton in stock, they will not sow that year as much as they would have sown if their stock had been sold and labour was cheap and plontiful. The area under cotton is also affected by the balanco of grain and bread stuffs in hand, and also by the rainfall. If the rain is heavy in the early part of the season, there is a large sowing of millet and other wet crops; if the rain holds off until August or September, there is a large area under cotton, but, if the August rain also holds off and there is but little rain till October, wheat and gram take the place of cotton. Cotton fields are manured some time before the cotton is sown. The husbandmen say that if manure is put in along with or immediately before the cotton seed and the rainfall is scanty, the manure does not mix with the soil, and injures the cotton plant especially the American plant. The manure used is pulverised village refuse and rubbish, and occasionally oil plant or some other quick growing crop is raised and ploughed in. The soil is generally manured every second or third year.

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Corros. Tillage.

Many of the better class of husbandmen take great care in preparing their cotton land. It is cleared of all the stumps of the previous crop by the heavy hoe or kunti. Wherever it is overgrown with the karige (K.) or hariali (M.) Cynodon daetylon grass, the land is ploughed with the heavy plough. Even repeated workings of the heavy plough do not always succeed in uprooting the entangled and deep rooted hariali. Field labourers are engaged who turn out with pickaxes or kudlis (K.) and dig the land often two feet deep This is very slow and hard work, but the result repays the severe labour and the expense. After ploughing, or deep digging, the heavy hoe or kunti is again used to thoroughly loosen the soil. When the soil is thus broken and smoothed it is considered ready for the seed. The Dharwar husbandmen take the greatest care not to sow cotton at any time which will bring the plant to maturity at a season when heavy falls of rain may be expected. As a rule cotton sowing begins in the latter part of August. By this time the land has been thoroughly soaked, and is so far drained that the surface is comparatively dry. A fairly dry surface with much moisture below is the state in which land should be for sowing either American or local cotton. Soil in this state helps the seed to spront and draws the tap roots deep enough to support and bring the plant to perfection, when the hot weather and the trying east winds set in. sowing it New Orleans seed is rubbed by the hand on the ground in a mixture of cowdung and water; for their woolliness keeps the seeds from running freely through the seed drill. The seed is sown with the aid of the kurgi or seed drill which has iron teeth eighteen inches apart, to each of which a hollow bamboo tube called yellishedi (K.) is fastened. Bullocks are yoked to the seed drill, and, as they work, the iron teeth plough two drills, and in these drills the cotton seed is dropped through the bamboo tubes. The seed drill is immediately followed by the hoe which closes the drills. Frequent hot sunny days after sowing promote sprouting and about three months more remain during which from time to time rain may be looked for. The seed leaves begin to show in six to twelve days. In about a month, when the plants are three or four inches high, the farmer takes his grubber or yadikunti, and works it between the cotton plants, doing two rows at a time. The grubber roots up all young weeds and grass. At the same time it turns the surface soil, keeps it from souring, and heaps the soil at the roots of the young plants. This heaping of the soil is repeated several times, the oftener the better, until the plants grow too high to work the grubber. The more hardworking and careful husbandmen supplement the grabber with hand labour. For this men, women, and children are employed on 3d. to 6d. (2-4 as.) a day, weeding at surprising speed with a kurchegi or miniature sickle. By the beginning of October, a strong, dry, cutting east wind sets in. The east wind lasts till about the middle of November, when the strain is eased by occasional moist southerly and westerly breezes and timely heavy thunderstorms. After this the dry east wind again sets in and blows steadily The American cotton plant usually flowers in December, often ten days to a fortnight in advance of the local plant. Its cotton bolls mature in February and March. A good American

crop usually yields five pickings, with a week between each; a poor crop not more than three pickings with a fortnight between each. All of the picking, and, in the case of the local cotton, almost all of the ginning, is done by women and children, the men's share in

the labour ceasing when the plants are full-grown.

Crossing has very often been tried in Dhárwár with a view to improve the different varieties. Attempts have especially been made to cross the local plant either with New Orleans, Sea Island, or Egyptian, so as to keep the hardiness and strength of the local plant, and gain the silkiness, length, and large outturn of these foreign varieties. So far back as 1859 the Bombay Chamber of Commerce explained the decline in the quality of Dharwar American cotton to natural crossing, the result of mixed sowing of the local and foreign varieties. Such a result Dr. Wight (1842-1850), a botanist and a practical cotton planter in Koimbator, thought impossible. 1872, Mr. Shearer stated that in his experience the cotton of plants grown from seed that had been looked on as crossed, on coming to maturity, showed no marked improvement on those of the parent The only difference was in appearance. Plants obtained by crossing local and Egyptian grew well, but their bolls did not ripen. A cross of Egyptian or Sea Island with American seemed always to run out and the plants dwindled after the second year. If they ever produced bolls the staple was weak. Mr. Shearer tried to cross the different local varieties. The look of the plant often changed, still he could not say whether they were crosses or sports. Mr. Shearer traced the apparent changes, which often deceive an unprofessional eye, to difference in season, situation, and tillage.

Dharwar cotton is liable to two diseases, benithgi rog (K.) and karaghi rog (K.). Benithgi rog is brought on by continued hard cutting easterly wind; it turns the leaves red and blights them; the flowers and pods fall off without maturing and the plant slowly dies. Karaghi rog is brought on by cutting easterly winds with heavy morning dews and fogs; it disappears if a westerly wind sets in before the

disease has gained too strong a hold.

According to the season the acre yield of clean cotton ranges from fifty to 120 pounds, the yield of American cotton being greater than that of country cotton. According to the 1882-83 cotton report, during the five years ending 1882-83, the acre yield was estimated at fifty pounds of American cotton and forty-two pounds of local cotton. The cost of growing cotton is difficult to determine. Much depends on the grower the number of cattle he owns, the area of land he holds, the number of persons in his house, and many other conditions which more or less affect his actual cash outlay in growing cotton. Roughly the acre cost of growing American and local cotton is 11s. 41d. (Rs. 51b). As the value of the American crop may be set down at £1 10s. (Rs. 15) and the value of the local crop at £1 4s. 9d. (Rs. $12\frac{3}{6}$) the American leaves a net profit of 18s. $7\frac{1}{2}d$. (Rs. $9\frac{5}{16}$) and the local of 13s. $4\frac{1}{2}d$. (Rs. $6\frac{11}{16}$). To the net profit on the country cotton a small amount may be added, as in many cases the husbandman's family themselves clean the cotton.

In 1819, a year after Dhárwár passed to the British, the commercial resident in the coded districts, recommended that

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50,000 to 100,000 pounds of Brazilian cotton seed and some quantity of New Orleans and Sea Island cotton seeds should be procured and distributed in Dharwar. To tempt the husbandmen to try these foreign cottons it was proposed to offer a reward of £1710s. (50 pagodas) in each or in the shape of a gold medal and chain on the first delivery of five hundred pounds of clean white cotton free from seed dirt and leaf, that is at the rate of about 17s. Gd. pagodas) for each man of twenty-five pounds. This proposal was approved by the Madras Government, but it does not seem to have been carried out. In 1824 it was noticed that much land fit for growing cotton lay waste. The cost of clearing rich land was so great that a lease or haul of nine or ten years of light rent was not inducement enough to tempt the people to undergo the expense. In 1529 under orders from the Court of Directors, to improve local cotton and introduce fine foreign varieties, experiments were begun in Dharwar under Dr. Lush, who, in addition to his ordinary duties as superintendent of the botanical gardens at Dapuri in Poona, was entrusted with cotton experiments in Khandesh and Dharwar. Dr. Lugh reached Dharwar too late in the year to sow cotton. He bought some fields of growing plants, and proposed to ele in cotton in a way which could increase its value without adding much to its cost. He also proposed to distribute the seeds of the best Gujarat, New Orleans, and other annual cottons, which would ripen in the course of the season, so as to produce new varieties of the staple. The cotton bought and cleaned by Dr. Lush was favourably noticed in England and was valued at 51d. to 51d (31-36 as.) the pound, when Indian cottons were selling at Liverpool at 3d. to 6d. (2-4 as.) the pound. In the next season Dr. Lush chose land for a small cotton farm at Sigihalli in the Khanapur sub-division of Belgnum. The land was so situated that, if necessary, it could be watered by a stream. Partly owing to a had senson, but chiefly owing to the damaged state in which the foreign seed was received, the experiment failed; the entire crop sent to England amounted only to four bales. Of these four bales two, of a kind not recorded, were valued at 71d. to 81d. (5-53 as) the pound, one of American upland seed at 8d. to 8id. (51 - 51 as.) the pound, and one of Dharwar New Orleans at 8d. (51 as.) the pound. At this time the average price of Indian cotton in England was 41d. (25 as.) the pound. In spite of these high prices all four packages turned out unfit for spinning. Small quantities would still command the high prices named for candle-wicks and jewellers' purposes. The cotton was cleaned by a foot roller so ineffectively that the work had to be supplemented by a number of hand-pickers behind the foot rollers, who had to pass the whole of the ginned cotton through their hands and remove from it the broken seeds and dirt that had passed the roller. £6 (Rs. 60) were spent in cleaning 781 pounds of cotton. The landholders were unwilling to go on trying foreign seed. The yield was less and the quality was poorer than that of the local cotton. About this time (1829) a quantity of Broach cotton cleaned by the foot roller sold for 57d. to 6d. (3f.-4 as.) the pound.

Between 1829 and 1832 the results of the sowings of American cotton seed at Navalgund, Dhárwár, and Morab were various. The seed was liable to full off in quality, they withered, and got to look like the seeds of poor black-seeded cotton. In proportion to the seed distributed Dr. Lush received very little cotton. Some American seed sown as perennial and tried at the Sigihalli farm failed. Some Broach and Jambusar seed was tried at Navalgund, but the pods were attacked by field bugs, and the produce was poorer than that of the local cotton. About 1830 a small trade in Dhárwár cotton sprang up with China, and the Canton merchants highly approved of the consignments that were sent to them. In 1831 at the Sigihalli farm, five pounds of Pernambuco seed at first promised well, but the plants were afterwards blighted. November 1832 the plants were recovering, but up to that time there had been no outturn. Some Bourbon seed was tried with Some seed of a white-Pernambuco, but it did not come up. seeded perennial from the Dapuri garden was thought likely to turn out a fine silky cotton, and was prepared by the saw-gin. In 1832 some Egyptian was tried, and in November, Dr. Lush, notwithstanding a dry season, thought it more promising than the other varieties. During 1833 the results continued most discouraging. The Pernambuco was a complete failure in black soils and the American green-seeded varieties, that is Georgian Uplands and New Orleans, were found to degenerate rapidly and to yield thin unsatisfactory crops. In 1834 Dr. Lush thought Pernambuco might succeed in fairly moist red soil. Pure black soil was death to this seed. In 1835 experiments at the Sigiballi farm convinced him that Pernambuco would never answer in Dharwar. He thought Egyptian might succeed as an annual, as it bore a good crop the first year, and the proportion of its wool to seed was double that of the local cotton. In 1836 the Collector, Mr. Baber, while giving his opinion on the Sigihalli farm, said that though the experiments had gone on for five years, not a single landholder close to the farm had in the slightest degree changed his mode of cotton tillage, of gathering the crop, or of preparing it for market. About this time Dr. Lush showed that a new ginning machine was required, as the foot roller was not suited to foreign cotton, and as the American gin was a failure. In 1836 the Dhárwár experiments were closed. They were considered to have failed after a fair trial. Still Mr. Mercer the American planter, whon looking over a collection of experimental cottons at the India Office in London in 1840, picked out samples of Dr. Lush's white-seeded perennial which he said were quite equal to good New Orleans.

In 1838 several commercial bodies in Great Britain urged measures for improving Indian cotton. In consequence of this agitation, Captain Bayles of the Madras Army was sent to America to engage the services of trained men to teach the people of India how to grow and prepare cotton. Ten American planters were engaged and started for India in 1840 with a large quantity of the best cotton seed, some American tools, cotton gins, and presses. Of the ten planters three came to Bombay. In 1841 the Collector, Mr. A. N. Shaw, to whose steady and persevering

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efforts much of the success of the attempt to acclimatize American cotton in Dhárwar is due, planted, on the local system, some ton acres in Hubli with some of the Mexican seed sent by the Court of Directors. Mr. Shaw believed that of all Western Indian climates the Dharwar climate was most like the climate of the United States cotton-growing districts. Mr. Shaw was right, and his cotton, though the seed was old and though the plants were grown under many disadvantages, was declared by the local landholders and merchants better than their own, and was valued by the Bombay Chamber of Commerce at £1 to £1 10s. (Rs. 10-15) the khandi, that is twelve to eighteen per cent. higher than the best Broach, then the standard staple at Bombay. Mr. Shaw's fields gave ninety pounds of clean cotton the acre, while the neighbouring fields sown with local cotton returned only forty-five pounds the acre. Mr. Mercer one of the American planters, who reached Dhárwár about this time, was so satisfied with Mr. Shaw's fields, that his doubts of American cotton becoming a valuable Indian product disappeared. In spite of his success Mr. Shaw thought that no rapid spread of American cotton was possible, unless a simple portable gin was introduced. At this time most of the landholders were deep in debt and worked without spirit. The ordinary way of gathering the cotton crop was to let it fall on the ground and lie on the ground till the cotton bushes ceased bearing. Then the people went out and gathered it all in one gathering. They mixed the fresh and the old, making no attempt to separate the clean from the dirty. About the same time (1841-42) Mr. Hadow, then assistant collector, grew some Bourbon seed cotton on the native plan in the black soil of Gadag. The return was thirty-one pounds of clean cotton the acre. Bourbon is a perennial and seldom yields more than thirty pounds during the first season. The sample cleaned by the foot roller was especially praised by the Chamber of Commerce for its beautiful cleanness. In 1843 Mr. Mercer, with his assistants Messrs. Hawley and Channing, began an experimental cotton farm at Kusvugal five miles north-east of Hubli. The system was that followed by the Dhárwár husbandmen. The only change was that seed was sown at intervals from early June, while the local husbandmen never sow till late in August. year 545 acres were under foreign cotton. Of these 183 were planted by Mr. Mercer with six different varieties, eighty acres with New Orleans, sixty-three with Broach, sixteen with Koimbator from acclimatized New Orleans seed, eleven with Abyssinian, ten with Bourbon, and three with Sea Island. The result at first was discouraging, mainly owing to the effects of the constant high winds of the early months of the south-west rains. By September appearances greatly improved and Mr. Mercer described the prospect as truly promising. This was the case not only with the experimental farm but also with the fields of the local farmers. In spite of damage caused by heavy rain early in October, which also told on other cotton fields, Mr. Mercer considered his outturn better than any he had seen in India. The acre yield of clean cotton was fifty-four and a half pounds of New Orleans, thirty-two pounds of Broach, fifty-four

pounds of Koimbator, and eight pounds of Abyssinian. Bourbon and Sea Island gave no return. The Kusvugal husbandmen's returns were at the rate of forty-eight and a half pounds the acre on their fields of foreign cotton, leaving them six pounds behind their American rivals. From these results Mr. Shaw hoped by 1845 to see Dharwar cotton hold a high place among Bombay cottons. To meet the ginning difficulty twenty-four ginning wheels or charkás and five saw-gins, cleaning 300 to 350 pounds of cotton in a day, were procured, and several gin-houses were opened. In Mr. Shaw's opinion, and this opinion experience has proved correct, New Orleans cotton yields a larger acre outturn than local cotton. New Orleans is also more easily gathered free of dirt than the local cotton. Its covering leaves or calyx are tougher and thicker, and less apt to break and mix with the fibre than the local covering leaves. The local cotton is also more apt to be damaged by falling on the ground. Further the proportion of wool is larger in New Orleans than in the local cotton. In a hundred pounds of New Orleans thirty-three pounds are wool, sixty-six pounds seed, and one pound waste; in a hundred pounds of local cotton twenty-four pounds are wool, seventy-five pounds are seed, and one pound is waste. Except that they were ill-ginned, parcels of the 1843 experimental cotton were favourably noticed by the Bombay Chamber. Mr. Hadow's experiment with Bourbon at Gadag did not pay its cost in the first and second years (1842-43). In the second year (1843) it was under the care of Mr. Hellier, a German, to whom it had been made over by Mr. Hadow. In Mr. Shaw's opinion the result showed that no further experiments should be made with Bourbon. It would never be a success and all experiments with it would only interfere with the efforts to spread the cultivation of New Orleans. Mercer agreed with Mr. Shaw, and added that the outturn of Bourbon was less than that of the local cotton. Shortly after this Mr. Shaw went to England. He was succeeded by Mr. Goldsmid, who, as well as Mr. Mansfield the first assistant collector, took much interest in the cotton experiments.

In 1844-45, 2749 acres were under American cotton. A second experimental farm of 168 acres, of which 146 were under New Orleans and twenty-two under Broach, was started near Gadag under Mr. Hawley, while Mr. Mercer continued his experiments at Kusvugal. Mr. Hawley met with remarkable success. Orleans gave an acre return of 941 pounds of clean cotton and his Broach of 123½ pounds. Some of the fields would have done credit to the banks of the Mississippi. Mr. Mercer's plants were attacked by field bugs and caterpillars and yielded poorly. The acre return of clean cotton on 150 acres of New Orleans ranged from eighty-one and a half to fourteen and a half pounds. The return on sixteen acres of Broach gave an average of sixty-three pounds, ten acres of Bourbon gave an average of twenty-two pounds, and eleven acres of Abyssinian an average of ten and a half pounds. In this season both Mr. Mercer and Mr. Hawley tried manure. In 1845 the experimental farms were closed on the ground that it was no longer necessary to supply the people with American seed. Twelve saw-gins were at work, seven private and five Government, but to meet the people's wants at least twenty more were required. In 1845-46 the rains Chapter IV.
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were disappointing, and instead of 17,000 acres only 11,176 acres were planted with American cotton. In this season the planters were allowed to raise cotton for Government by contract with the landholders. Mr. Morcer paid 4. (Rs. 2) for tillage, 2s. (Re. 1) an acre for land rent, and, after paying all other expenses, 7s. (Rs. 31) the acre for carrying the cotton to the ginning house. Mr. Mercer calculated that, at an acro yield of sixty-three pounds of clean cotton, the crop would cost the husbandman 14d. (1a.) the pound. After giving credit for the value of the seed it was found that the crop represented an outlay to the grower of very little over a penny a pound. The whole produce of the district was calculated at 1200 to 1500 bales of American cotton. The growth of American cotton was left entirely to the people. But Government were the only buyers and there were no saw-gins to gin it. The want of saw-gins was the great drawback to the spread of American cotton, as the people would not grow American cotton unless they were sure that they could clean it and sell it. In June of the same year (1845-46) Mr. T. W. Channing, one of the American planters at Kusvugal, brought to the notice of Government that the American saw-gins were not suited to the acclimatized varieties, and that better and cheaper saw-gins might be made in India. He thought that by making them on the spot the price of a saw-gin might be lowered from £35 to £19 16s. (Rs. 350-198). A gin made under Mr. Morcer's directions cost only £14 14s. (Rs. 147). At a trial made by Captain, the late Sir George Wingate, then superintendent of the revenue survey, the local gin beat the American saw-gin by twenty-five per cent. Mr. Mercer asked for a good European mechanic. Instead of this, and this was probably a better arrangement, the Court of Directors sent out 500 saws the only part of the gin which could not be easily made in Dharwar. It is in great measure to the arrangements which were then made for cleaning the cotton that Dharwar owes its special success in the growth of saw-ginned Dharwar.

In 1846-47, for the first time, local dealers bought American cotton on their own account, and at rates twenty per cent over local cotton. Mr. Hawley soon after resigned and was succeeded by Mr. Blount, also an American, who had come from Khandesh. Mr. Mercer left at the end of 1846. About the same time the tests made by Lancashire spinners on Government shipments of Dharwar New Orleans showed a loss of twenty-one pounds on 332 pounds of Dharwar New Orleans before carding, compared with a loss of 384 pounds on an equal quantity of common Surats. After carding the losses on similar quantities were sixteen pounds of Dharwar New Orleans and 28% pounds of Surats. When spun fifty pounds of ordinary American New Orleans showed a loss of 171 per cent and an outturn of 411 pounds of yarn, while the same quantity of Dharwar New Orleans turned out 424 pounds of yarn with a loss of fifteen per cent. The yarn of Dharwar New Orleans was pronounced equal to yarn made from ordinary American New Orleans. In May 1846 Mr. Mansfield, then acting Collector, recommended Government to cease holding out special inducements for the growth of American cotton. The people were willing to sow it to any extent, provided Government guaranteed them a sale. After another year, if the merchants did not step in

and help in creating a demand, he did not see why Government should foster the production of an article which had no fixed market value. In a second letter about the end of the year, Mr. Mansfield urged that the uncertainty of the price of Dharwar New Orleans cotton in Bombay was the doubtful point in the experiment. Until something was done to ensure a demand for the cotton, the burden of buying the entire crop would continue to fall on Government. He thought that part of the Dharwar American crop should be offered for sale in Bombay. Government approved of selling some of the cotton in Bombay, but were unable to offer it for sale as the Court of Directors found that the opinion had lately spread in England that the recent shipments of good cotton were pet packages from cotton grown as a garden crop. Court were therefore anxious to have as much cotton as possible to show that the better class of cotton could be grown in sufficient quantities for trade purposes. One bale was left in Bombay for the inspection of merchants. Towards the close of the year Mr. Townsend, the Revenue Commissioner, represented the results of the Dharwar cotton experiments as encouraging. The weak point was the want of a suitable provision for ginning. Government agreed with Mr. Townsend that Mr. Mercer's efforts to establish American cotton had been to a great extent successful. In 1847-48 20,500 acres were under New Orleans cotton. At first an outturn of over 700 tons (2000 khandis) was expected; later on it was found that the unfavourableness of the season would reduce the outturn by one-third. Twenty-nine saw-gins were at work in the district and many more were wanted. About this time the American planters, brought by Captain Bayles, expressed the opinion that New Orleans cotton would succeed only in districts which like Dhárwár shared in the two monsoons. Early in 1848 Mr. Goldfinch, the first assistant collector, discovered that in many villages the persuasion of the village authorities to get the landholders to grow American cotton had differed little from compulsion. Mr. Bell, the Collector, satisfied himself that Mr. Goldfinch was correct. Persuasion was stopped and the area of American cotton fell from 20,500 to 3350 acres. The people had grown American cotton because they had been ordered to grow it. Still in parts of the district they would grow New Orleans from choice, if only they could be sure of a market and had less trouble in getting it ginned. In this year (1848-49) the New Orleans crop was excellent, upwards of ninety pounds of clean cotton an acro, and it yielded such admirable seed that the character of the cotton was permanently improved.

In 1849-50 over 15,500 acres or five times as much as in the year before were under New Orleans. The increase was due to a better understanding with the people and better ginning arrangements. 1849-50 was one of the best New Orleans seasons. It was a bumper crop, and very much more of it than in any former season was ginned in the husbandmen's gins, which had risen from five to sixty-two. Still, either because there were still not enough gins or because the gins were badly worked, the ginned cotton was unsatisfactory. The unsatisfactory state of the Dhárwár cotton was not confined to the American cotton. The local cotton was at

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this time the dirtiest and the most fraudulently packed cotton that came to Bombay. Up to 1849, apart from what the sales of the cotton realised, Government had spent £20,000 (Rs. 2,00,000) on cotton experiments in Dharwar. In 1850-51 over 31,000 acres were under New Orleans, Shiggaon, now Bankapur, showing nearly 13,000 acres or an increase of 200 per cent over the previous season. In the Liverpool market this cotton fetched 31d. the pound. 1851-52 over 42,600 acres were under New Orleans, of which 17,000 acres were in Bankápur and 700 acres in estate or jágir lands. this year Government gave up buying cotton. By this time Dharwar New Orleans had gained so high a name in England, that the agents of Manchester firms in Bombay were ordered to make large purchases, and, in 1851, Dhárwár New Orleans was sold in Dhárwár at 3d. a pound (Rs. 100 a khandi). In 1852-53 a difficulty regarding the repair of the saw-gins reduced the acreage to a little over 28,000 acres, exclusive of nearly 8800 in estate or jágir lands. Great exertions were made at the Dharwar ginning factory to meet the want of gins, and they were so far successful that in the next year 184 gins were in use, and the area rose to 41,403 acres, of which nearly 10,000 were in estate lands. This success was the more satisfactory that in this year Government had withdrawn from ginning as well as from buying. In 1853-54, 41,403 acres were under New Orleans and 252,006 acres under local cotton. In 1854-55 upwards of 63,000 acres in Government lands and more than 18,250 in estate land were planted with New Orleans. During these years the area under local cotton varied from about 223,000 acres in 1850-51 to 210,260 acres in 1854-55. During the same years the price for a khandi of 784 pounds of New Orleans varied from £7 10s. to £9 10s. (Rs. 75-95), and of local Dhárwár from £6 to £8 (Rs. 60-80), that is an average of £1 10s. (Rs. 15) or 184 to 25 per cent in favour of New Orleans. Compared with what he had seen between 1843 and 1850, in 1854 Captain, now General, Anderson noticed a marked improvement and extension in cultivation. The fields were kept carefully cleaned and manuring had become so common, that in some parts crops were grown to be ploughed in as manure. Some Bankapur cotton growers owned to occasionally getting 500 pounds of seed cotton to the acre, and 300 to 390 pounds was not unusual. During the thirteen years ending 1853-54 the mean price of a bundle or nug of 300 pounds of clean cotton was £1 19s.3d. (Rs. 19k) in Navalgund and £2 10s. (Rs. 25) in fifteen other cotton centres. At the same time the Government rental had been reduced to an acre average of 93d. In 1855-56 defective ginning arrangements reduced the area of New Orleans cotton to 50,803 in British and 15,711 acres in estate lands. In the same year 202,843 acres were under local cotton. In 1856-57, 108,207 acres were under American and 196,931 under local cotton.

In 1857-58 the area under New Orleans was 130,880 acres and the area under local cotton 252,850 acres. In this year several experiments were made with Egyptian cotton seed. The Collector found the plants grow remarkably well. They were much larger and finer bushes than the New Orleans, but the pods rarely matured and were very liable to be destroyed by insects.

An experiment made with watered Egyptian failed. Messrs. Brice & Company, who since 1854 had opened a trade agency at Dharwar also made experiments with Egyptian and failed. They inclined to attribute their want of success to the exceptional luteness of the rains, which did not set in till the middle of October and then lasted for a month. At the beginning of March the plants were full of pods and promised a rich crop; but the dry winds of March and April were too severe a trial, and the pods fell without yielding cotton. The Collector did not agree with Messrs. Brice & Company that the failure had been due to untimely rainfall. In his opinion Egyptian cotton was not suited to the district. The weather described by Messrs. Brice & Company had done little harm, either to the New Orleans or to the local crop. The details of Messrs. Brice & Company's experiments show that one at Gadag failed entirely; the plants came up and then died away. At Bankapur the experiment promised well to the end of February; but by the middle of April 6800 plants gave only twenty-six pounds of seed cotton on first and second pickings. They yielded no more cotton, and animals were allowed to graze on the plants. At Hubli 8124 plants gave 100 pounds of seed cotton, which, on being ginned, gave thirty-two pounds of wool, seventy-one pounds of seed, and three pounds of waste. These experiments with Egyptian seed were on a fairly large scale as they covered 1691 acres including sowings in five sub-divisions and 51 acres in Savanur. The result was a mean acre return of about twelve pounds of clean cotton. But as the cotton was valuable, its estimated price reduced the computed loss on the experiment to about 104d. (7 as.) an acre. Up to May 1857 cotton improvements in Dharwar had cost Government £42,463 12s. (Rs. 4,24,636). Some of this large outlay was recovered in the sale of consignments of Government cotton in England. In 1858-59 the cotton area showed an increase of 4000 acres in Government lands, and from some unexplained cause a decrease of 10,000 in júgir lands. The whole area under New Orleans was 124,752 acres, compared with 214,993 acres under local cotton. The experiments to introduce Egyptian cotton were continued; 261 acres were planted in seven sub-divisions. The result was again unsuccessful, the mean acre yield of ginned cotton being barely fifteen pounds and the net acre loss on tillage nearly 1s. 9d. (14 as.). As in the previous year, the plants grew vigorously and bore quantities of bolls; but most of the bolls never ripened. The assistant collector. who managed much of the experiment, stated that he had not seen one single instance of success with Egyptian cotton. Samples of the small Egyptian outturn together with samples of ordinary Dharwar New Orleans were sent to the Bombay Chamber of Commerce. The Egyptian was valued at 1s. the pound and the New Orleans at 6d. In 1859 the Dhárwár cotton growers were very flourishing, mainly owing to the handsome profits which American cotton yielded. In 1859-60 increased ginning facilities raised the area under New Orleans by fifty per cent, the total area being 191,282 acres. At the same time the area under local cotton was 230,665 acres. In this year fifty-six gins were issued from the Dharwar ginning factory. A third experiment with Egyptian ended much like the former

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attempts, and the Collector, Mr. Goldfinch, considered the variety unsuited to the soil. An English merchant, Mr. Brook, made fairly large experiments with Egyptian and Egyptian Sea Island. Mr. Brook was of opinion that these cottons would succeed if they were sown much earlier than the local cotton. This theory was tested. The result showed that Mr. Brook was to a certain extent correct. Where good seed was used, the plants throve amazingly, and so far as size and appearance went, beat all other varieties. They went too much to wood and leaf, but still seemed likely to yield largely. They matured much sooner than the other cotton. The crop was ripe early in October, when a heavy burst of rain almost yearly falls. The rain fell and the cotton was spoiled. What was picked was weak in staple. This and their own experience so disappointed the landholders, that they refused to try any more Egyptian at their own risk. In 1860 the practice of mixing local and New Orleans brought New Orleans into disrepute, and it lost much of its value. The Bompay Chamber of Commerce thought the falling off was due to crossing. Further inquiry showed that this was a mistake. Dr. Forbes' conclusions were more correct. He thought the decline was due to wilful adulteration, and to the cultivation of local and American in the same field. Both kinds were picked and ginned together, and as the local cotton was cut to pieces in the saw gins, the thorough mixture injured the whole. So greatly did the New Orleans suffer that during the ten years ending 1860 its value had fallen from seveneighths of a penny above to a quarter of a penny a pound below Broach. That this fall in value was not due to a deterioration in the New Orleans seed was proved by growing two packages, one from fresh New Orleans seed and one from ten years old, that is ten times cropped, New Orleans. The Bombay Chamber valued the fresh seed cotton at 61d, and the old seed cotton at 61d, a pound. The only difference was that the staple of the old cotton was slightly weaker. In 1860-61, 191,026 acres were under American and 234,452 acres were under local cotton. Fifty-five new gins were issued, and gins were still in great demand. In 1861-62 New Orleans rose to 214,310 and local cotton fell to 200,491 acres, and forty-two more gins were sold, making a total of 864 working gins. In 1861 besides proving that the decline in the value of New Orleans was solely due to mixing, Dr. Forbes, with the help of the district officers, succeeded in getting the people to root local plants out of New Orleans fields. The result was a marked advance in the value of the 1861 New Orleans. In 1862 the mixing was again as bad as or worse than ever. In 1862 Dr. Forbes with Mr. Heywood a leading Manchester merchant, went to see a gin-house. On entering the courtyard, which was enclosed by a high wall, they saw on one side a large heap of trashy local cotton, and near it another heap of about the same bulk of fair American seed cotton. The space in front of the gin-house was covered with a mixture of the two heaps spread in the sun to dry, and on this mixture the gins were at work. Dr. Forbes found that the husbandmen blamed the ginners for the mixed cultivation. The ginners, they said, returned them mixed seed, and this they had to sow.

The ginners said the fault was with the husbandmen who gave them mixed seed cotton to gin. The charge was generally brought home to the ginners. Dr. Forbes found that in the Hubli sawgins the American and local cottons were being mixed. Mr. Everitt, an English merchant at Dhárwár, found mixed ginning spreading so rapidly that he had to close his Dharwar business. Dr. Forbes wrote that the American was now more than half local, and that too of the worst description. Mr. Gordon, the Collector, said that he and his assistants were powerless to prevent the mixing, and that it must do great mischief to the cotton trade. Mr. Hart, the Revenue Commissioner, agreed with Mr. Gordon that this mixing should be stopped and that passing an Act was the only way to stop it. Dr. Forbes was satisfied that fear of the law was the only way of stopping the mixing. The owners of gin factories were rapidly growing rich. He had orders for 591 gins worth £17,800 (Rs. 1,78,000) from people who a few years before could not buy a few gins worth £3 or £4 (Rs. 30-40). As Dr. Forbes' opinion was upheld by almost all the officers who were consulted, Government appointed a Commission to inquire into cotton adulteration.1 Three members of the Commission, Messrs. Forbes Scott and Hannay, came to the Bombay Karnátak to inquire into the state of the Dhárwar cotton trade. They found that, during the season in which the inquiries were made, little or no local or American cotton had been shipped clean or unmixed. Besides the mixing of different varieties of cotton the dealers admitted that their cotton was mixed with seeds and other rubbish, and that it compared badly with the exports of former years. Many of the local dealers were anxious that the trade should be regulated by law and placed under inspection. In their report the Commissioners stated that the evils of the Dharwar cotton trade were beyond usual remedies, and affected not only local but general interests. Nothing but the energetic action of Government could check so widespread an evil. Existing laws were insufficient, a fresh Act was required. With their report they submitted the draft of a Cotton Frauds Bill, which had been prepared by Mr. Scott one of the Commissioners, and which had been altered and completed in accordance with the opinion of the Commissioners. This measure, with some amendments, was brought before the Legislative Council early in 1863. passed in April 1863, and became law in July of the same year as the Bombay Cotton Frauds Act IX. of 1863. The first cotton inspector appointed for Dhárwar was Captain, now Colonel, R. Hassard, of the Bombay Staff Corps, who had already received charge of the Dharwar factory from Dr. Forbes, on his appointment as Cotton Commissioner. Captain Hassard's duties of superintendent at a chief and two branch ginning factories left him little time for inspection. The American war had begun and the great rise in the value of cotton enabled even mixed and adulterated cotton to find a In 1862-63, exclusive of the cotton area in estate villages,

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¹ The members of the Commission were Messrs. G. Inverarity, M. H. Scott, R. Hannay, R. McIlwraith, G. F. Forbes, and C. Forjett. Three of the members were nominated by the Bombay Chamber of Commerce.

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363,174 acres were under American cotton, and 207,063 acres under local cotton, and in 1863-64,323,535 acres were under American and 203,626 acres under local cotton. The local price of Dharnar New Orleans rose from £14 (Rs. 140) the khandi in 1860 to £38. (Rs. 380) in 1803, and to £46 10s. (Rs. 465) in 1861, and overy available patch was planted with cotton. In 1864-65 a bad season reduced the American cotton area to 280,230 acres and the local cotton area to 185,374 acros. Growers and dealers tried to supplement their deficient crop by mixing and falso packing, and, as most of the inspector's time was again devoted to the factories, the people began to think. that the Frauds Act was not to be enforced. The offices of superintendent of the factory and of inspector were separated. Early in 1865 Mr. G. Blackwell was appointed inspector. He began a vigorous inquiry, and though several of the prosecutions failed from want of proof of fraudulent intent, the dread of conviction greatly reduced the amount of adulteration. Efforts were also made to induce the landholders to give up mixing the two varieties of seed in the same field, and to pay more attention to the choice of good large seed. In 1865-66, there was a further fall in the area, to 160,046 acres under local and 261,943 acres under American cotton. This fall was probably due to the scarcity of fodder and grain caused by the failure of rain in 1864-65. In 1865-66 the rainfall was again far from favourable, and the outturn of most crops was poor. The inspector found it very difficult to prove the mixing at the gins fraudulent under the provisions of the Act. In this year large supplies of fresh seed were distributed, and did much to improve the quality of the New Orleans cotton.

In 1866-67 the area under American rose to 304,688 acres and under local cotton to 161,750 acres. Under the influence of the cotton inspectors, frauds and dirt-mixings were greatly checked. Still, in the opinion of Mr. Bulkley the inspector-in-chief of cotton, the working of the Act had brought to light a flaw in the provisions regarding fraudulent mixing. To be fraudulent, mixing must take place in cotton either offered for sale or offered for pressing. There were no presses in Dharwar and the cotton was sold not in Dhárwár but in Bombay. So the inspector might see in a ginning yard a heap of local, a heap of American, and a third heap of seed to be added as a make-weight and yet fail to secure a conviction. One effect of the cotton famine in Lancashire caused by the American war was to give fresh importance to the question of improving the supply of Indian cotton. It was felt that no considerable results could be looked for unless specially trained men were employed and set apart for the special duty of improving cotton. In 1866-67 Mr. W. Shearer was sent out by the Secretary of State to undertake the charge of cotton experiments. In 1867-68 the area under American cotton fell to 800,399 acres and the area under local cotton rose to 181,485 acres. Mr. Shearer began his experiments on twelve acres of land near Dharwar which were leased for five years. He carefully planted two kinds of local cotton, and the result promised fairly well. But he was ordered to Gujarat before the crop was picked and the cotton was sold before his return and no record kept. Mr. Blackwell the inspector found a great deal of false packing. He tried to persuade merchants to aid him in bringing the offenders to punishment, but failed, as the merchants though willing were afraid to offend the dealers. In 1868-69 the area under American cotton rose to 317,310 acres and under local cotton to 194,586 acres. Though both crops suffered from blight the outturn was fair. With the revival of American supplies the To make good the loss in price, the dealers price of cotton fell. weighted the cotton by adding dust and other refuse. These fraudulent mixers were fairly safe as with a little care they could destroy the cotton without breaking the letter of the law. Of several prosecutions, all of which were aggravated cases clearly within the spirit of the law, only one was successful. Mr. Shearer's farm of twelve acres near Dhárwár was given up and a larger farm of thirty acres was started at Kusvugal near Hubli. In 1868 two more cotton experiment superintendents, Messrs. Milne and Strachan, came from England and were placed for some time under Mr. Shearer. Mr. Shearer's experiments included sowings of Dhárwár American and local, and of Broach, Tinnevelli, Tanjor, and Koimbator. the local Dhárwár none of these yielded a good outturn.

In 1869-70 the area under American rose to 425,099 and of local to 222,116 acres. This great increase in American was mainly due to increased facilities for repairing the cleaning machinery. The sowing was late on account of heavy early rains, and the crop was much hurt by blight when the plants were nearly mature. About fifty tons of the best acclimatized seed were distributed in Karajgi, Navalgund, Ranebennur, and Ron, and about a ton of fresh American seed was distributed by Mr. Shearer. The acclimatized seed was willingly sown, but the people were afraid to risk the fresh American. Fresh American seed sown by Mr. Shearer throve well. Two fraud cases were tried; but both failed. Mr. Shearer worked this year on a much larger scale than before. He had farms of 198 acres in Bankapur, Kusvugal, and Navalgund; and planted several varieties of cotton. The result was disappointing mainly owing to the badness of the season. In these experiments the late sown plants throve better than those sown earlier. The object in dividing the experiments was to secure a fair average of soil and climate. In addition to this Mr. Shearer set apart a small piece of land close to his house at Kusvugal, as a nursery to study the habits of the different cotton plants, and to test the theories of crossing. In 1870-71 the area under American fell to 335,297 and under local to 195,304 acres. Up to the time of picking, the season was fair, then heavy rain fell and damaged the ripe crop. Frauds were rife, but there was no successful prosecution; and great complaints were made of the state of the saw-gins. Mr. Shearer continued his experiments in the same sub-divisions, but on fresh land. The land was ploughed with English ploughs and was afterwards stirred with an English grubber. He used both patent and native manure, but failed to discover any difference in the yield of cotton crops on manured land, and on unmanured land. experiments were more successful than any of his former ones; the largest acre yield of clean cotton was 129 pounds. The people were Chapter IV.
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fairly successful. Owing to the failure of the usual October and November rain the cotton crop was nowhere good and this failure of rain was accompanied by so blighting an cast wind that Mr. Shearer thought it must be poisonous. The acro yield of clean American cotton in well prepared good black soil was thirtyfour pounds. The acre outturn of clean local cotton in equally good soil was only twenty pounds. One plot of ground was sown with American cotton with sunflowers scattered here and there. The cotton plants grow well till November and were then caught by blight. The superintendent tried overy means, including watering, to save the crop; with all his efforts he only succeeded in keeping the leaves a little greener than those of the plants in the neighbouring fields. Another three-acre plot was divided between selected American seed and freshly imported American seed. The land was well manured with slaughter-house refuse and poudrette in separate parts, but with no variety in result. The crop was attacked by blight and the acre outturn was nineteen pounds of clean cotton. A quantity of dissolved Peruvian guane, costing in Bombay £17 10s. (Rs. 175) a ton, was freely applied to cotton, but apparently without any improving effect. The guano was applied at the rate of three hundredweights the acre on a field of local cotton. So long as rain lasted the guanced patch grew specially freely. When the dry weather set in this difference disappeared, and the outturn proved no larger than that of the neighbouring fields. The saw-gins were falling into disrepair and their state was unsatisfactory.

In the famine year of 1876-77 the area under American cotton fell : to 44,024 and under local cotton to 99,830 acres or little more than one-fourth of the average area of the five previous years. The large number of convictions in the previous year was followed by a great The dealers never improvement in the state of the cotton. remembered such clean cotton. At the Navalur farm Mr. Shearer sowed American fresh and acclimatized, and selected Broach. In addition to the experiments at the Government farm Messrs. Robertson Brothers & Co. planted about fifteen acres with Hinganghat seed in three fields of about five acres each. Their aim was to try Hinganghat seed both for early and for late sowing. The first field had no manure and was sown about the loth of August; the second field had twenty carts of common village manure and was sown about the 20th August; and the third field had thirty carts of common village manure and was sown about the 25th of August. Messrs. Robertson & Co. arranged with the landholders to make good whatever the outturn of the Hingaughat fields fell short of the outturn of neighbouring fields of local or of American-Dhárwár. At the same time any return over that of neighbouring fields was to go to the landholder. The complete failure of the late rains made these arrangements useless. So complete was the failure of the cotton crop that Messrs. Chrystal & Co. in Gadag did not press a single bale. Of four prosecutions two were successful. The crop was very small and what came to market was clean. In 1877-78 the areaunder American rose to 128,277 acres and the area under local cotton to 277,300 acres. There was no local case of mixing or false

packing, but much seriously adulterated and falsely packed cotton came from the Nizam's country and was sold on the coast under the name of Dhurwar saw-ginned cotton. Messrs. Robertson & Co. continued their experiments in Hinganghat. The seed was sown in July and in November the plants with flowers and some with bolls promised well. Heavy rains in December spoiled the crop reducing the outturn of nineteen acres to three bales of clean cotton. One of the chief objects of Messrs. Robertson & Co.'s experiments was to introduce an early cotton into Dhárwár. The result was disappointing. The plants sown in July did not ripen earlier than the plants sown in September. It seemed as if the plants were unable to ripen so long as the ground remained damp and the weather continued cloudy. Mr. Campbell, the manager of the Kárwár Cotton Company, made an experiment with Egyptian Bunnia cotton. Mr. Campbell divided his field into two parts: one which he worked in the same way as the people grew American cotton, and the other part which he watered. The seed was sown on the first of September, the first watering was given on the 17th of November, and watering was continued at intervals until the beginning of May. Mr. Campbell found no difference between the watered plants and the unwatered plants. The number of watered bolls was small, and the staple was good. But the colour was so bad that it looked as if it had been stained by damp. Five hundred pounds of fresh American seed were received from Government for distribution. In 1878-79 the area under American cotton rose to 246,210 acres and under local cotton fell to 233,280 acres. Of eight cotton fraud prosecutions six were successful. As in former years the passing as Dhárwár American of cotton adulterated in neighbouring states was a serious evil. In September 1879 the Government of India recommended that all special legislation for the suppression of cotton frauds should cease. The Secretary of State did not agree with the view held by the Government of India. In 1879-80 there was a marked fall in American and rise in local cotton. The American area fell to 141,726 acres and the local area rose to 331,465 acres. On the 4th of March 1880, the Secretary of State sanctioned the proposals that had been made in 1879 by the Government of India, and desired the Bombay Government to do away with the special cotton fraud prevention establishment. According to Mr. Walton, the opinion of the local European agents and native merchants was opposed to the giving up of Government efforts to check fraud. According to Mr. P. Chrystal, a Bombay merchant who is well acquainted with the Belgaum and Dhárwár cotton trade, the Bombay dealers and merchants in American Dhárwár and Kumta cotton think (1883) that the Cotton Frauds Act failed to stop adulteration in the Bombay Karnátak. Mr. Chrystal thinks that since the Act has been stopped, there has been no noticeable increase in adulteration. The American Dharwar has declined in staple and lost its silkiness, but this he thinks is due not to more mixing but to deterioration in the American seed. In 1880-81 the area under American cotton fell to 77,121, and the area under local cotton rose to 439,251. In 1881-82 the area under American cotton rose to 138,790, and the area under local cotton fell to 395,396 acres.

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In 1882-83, the area under American cotton further rose to 145,397, and the area under local cotton fell to 375,070 acres.

The following table gives the areas under American and local cotton during the forty-one years ending 1882-83:

Dhdriedr Cotton Area, 1842-1883.1

YEAR.	American.	Local.	Total.	Year.	American.	Local	Total
1819-13 1843-44 1941-46 1941-46 1845-46 1846-47 1847-48 1848-49 1848-49 1849-5-1 1850-5-1 1850-5-1 1850-5-1 1850-5-7 1857-6-8 1850-5-7 1857-6-8 1850-6-7 1857-6-8 1850-6-7 1850-6-8	545 2740 11,176 22,331 20,502 3351 15,573 21,648 42,647 23,010 41,407 63,293 Cr,514	Acres. 181,237 178,411 161,501 170,490 170,490 221,055 221,056 221,070 221,081 221,083	Acres 184,204 176,205	1504 65 1505 06 1500-07 1507-63 1608 09	. 425,079 . 575,277 . 105,600 . 215,825 . 231,311 . 556,275 . 44,021 . 129,277 . 246,210 . 141,726 . 77,121 . 125,700	Acres, 165,074 165,046 161,455 161,455 161,455 161,455 162,676	Acres, 627,171 405,001 405,001 405,001 401,400 401,400 501,401 501,500 501,500 501,500 405,500 405,500 405,500 405,500 405,500 601,400 601,400 601,400 601,400 601,400 601,400

GARDENS.

GARDENS are found chiefly in Bankapur, Hangal, Karajgi, Kod. and Ranchennur where irrigation is abundant and easy. The best gardens are below the large reservoirs. They are fenced with guava, lime, and other fruit trees, and contain sugarcane, cocoa and betel palms, and betel vine. During the greater part of most years the gardens draw a plentiful supply of water from the reservoir. The supply is also helped by the seaking of water through the poud bottom into the gardens. To help this soaking lioles are dug a few feet deep, and, if the reservoir fails, the water is scooped out of the holes by shallow baskets called gudás which are swung through the well and carry a basket full of water to a level high enough to let it run into all the small channels. Minor garden crops and watered dry crops as well as rice are often grown in the gardens as change crops after sugarcane or after the betel vine is removed, to give the soil fresh vigour. Some gardens with a poor water-supply grow only minor crops. Except in parts of Kod the better garden crops are grown with much care and labour. In the slovenly gardens of Kod, in one corner betel vines are mixed with a plantation of young betel palms. Between the rows of betel vines and perhaps in other parts of the garden are a few plantain trees, and, scattered about with little regard to regular planting are thirty to sixty cocoa palms. The rest of the garden is altogother untilled, or is perhaps sown with crops which would grow nearly as well in a field as in a garden, but which have the merit of hardiness and of requiring little care. The chief garden crops are the betel vine, plantain, betel palm, cocoa palm. and mulberry.

¹ The figures are for the district of Dhárwár including alienated lands in Government villages and native state lands mixed with Government lands.

The Betel Vine elebulle (K.) or pan (M.) Piper betel, a perennial. is the chief garden produce. It is planted by cuttings. As it is a creeper, long thin quick-growing trees generally nagis, halivals, and chargachis are set close beside it for the vine to train on. The vine wants manure three or four times during the year, and, to succeed well, must be watered every eighth day and still oftener during the first year. The vine begins to bear leaves in the third year and yields a crop every third month. An acre of land contains upwards of two thousand plants. Leaves are gathered for four, five, six, and sometimes seven years when the vines die and are dug up, the leaves of the trees on which they have been trained affording vegetable manure to young plantains and their wood being used for fuel. After a crop of betel vino the garden is deeply dug all over. According to some accounts it lies fallow for a whole year and is then planted with sugarcano; after the sugarcano it enjoys another year of fallow, when the betel vine is again planted or instead of it plantains. According to others sugarcane is planted immediately after the ground has been cleared of the betel vine and has been well dug, ploughed. and levelled; then one year of fallow succeeds the cane, and the fallow is followed by plantains or betel vine, or, before these, by a crop of chillies or a dry-crop. Most of the betel leaves are used in the district, the rest are sent to Relgaum. Except to men of means the betel vine is not a paying crop as the heavy expense of two years of planting, manuring and watering has to be met before there is any return.

Plantains bálegidu (K.) or kel (M.) Musa sapientum yield only one crop. The trees are then cut down, but new shoots spring from the roots which are transplanted and set in a small pit with manure earth and dry leaves and well watered every eighth day. They are planted in lines four to five feet apart, bear fruit in the second year, and are then cut down. In some cases plantains are followed by a year's rest and the year's rest by betel-vine.

Betel Palms¹ adkigidu (K.) or supiri (M.) Areca catechu are generally scattered among the betel vines. When planted by themselves, an acre of land holds over six hundred palms. The palm appears above ground six months after the nut has been planted. If cared for and freely watered, at first twice and afterwards once a month, the betel palm bears fruit in eight years; otherwise it does not begin to bear for ten or even twelve years. It continues to bear yearly for fifty to seventy-five years. The nuts are taken from the tree between October and December.

Cocon Palms tenguigidu (K.) náriel (M.) Cocos nucifera bear when ton to twenty years old. If manured and watered, at first twice and afterwards once a month, they generally bear in their twelfth year and continue bearing nearly a hundred years.

The Mulberry hila (K.) tut (M.) Morus indica is found in many native gardens grown sometimes as a hedge plant and sometimes for their small and pleasant fruit. They seem to have been introduced

Chapter IV-Agriculture. GARDENS. Betel Vine.

Plantaine.

Betel Palms.

Cocoa Palms.

Mulberry.

¹ I'uller details are given in the Kanara Statistical Account, Bombay Gazetteer, XV. Part II. 7-9.

Chapter IV.
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GARDENS.
Mulberry.

some sixty years ago when the first attempt was made to grow silk.1 In 1823 Mr. Baber the Collector introduced worms from Maisur into the Bombay Karnátak, first at the Dhárwár jail, and afterwards among a few Musalmans near Dharwar, Hubli, and other towns. These persons were granted seven years' leases and were given advances of cash. The attempt to grow silk was so far successful that in 1827 a package of Dhárwar silk was sent to England. The ship which carried it was wrecked and the sample damaged. The Court of Directors reported that had the parcel been in a sound state the raw silk would have been sold at the rate of twelve shillings a pound. In 1833 Dr. Lush, who at that time was in charge of the Dharwar cotton experiments, reported that the people among whom the worms were distributed had each one or two acres of land under the mulberry. The outturn was a few mans of silk for local use which in the Hubli market sold at 14s. to 16s. the pound (Rs. 3½-4 the ser). In 1842 about four hundred pounds of a very inferior silk was made. In 1843 at Dhárwar there were 200 mulberry trees and 25,000 bushes, besides 10,820 bushes in the jail garden. About 272 pounds of silk worth £50 (Rs. 500) were made by the people and 144 pounds worth £36 (Rs. 360) were made by the prisoners. In 1848 after inquiry the attempts to grow the mulberry with a view of establishing a silk industry were stopped. In 1865 silk experiments were revived at Dhárwár by Dr. Mackenzie the jail superintendent. In the sixteen months ending September 1869 the jail produced nearly eleven pounds of raw silk worth about 16s. (Rs. 8) a pound. A comparison of the results of the last six with the first ten months of the period showed marked improvement in the weight of the cocoons and an advance from 6.7 to 8.7 in the proportion of silk to total weight. Dr. Mackenzie thought the improvement was due to the greater attention which had been paid to the food of the worms, to regularity in feeding them, to the airiness and brightness of their rooms, and to the efforts made to prevent the temperature varying more than from 85° to 90°. The worms were fed on mulberry bushes cut down at the beginning of each monsoon and not allowed to grow more than three or four feet high. The worm bred has not been identified. From Dr. Mackenzie's description it seems to have been one of the Bengal multivoltines; its total course is given at 55½ days. In 1872 besides the jail experiment there was a small mulberry plantation which turned out a fair supply of cocoons. During 1873-74 the mulberry plants throve well without watering, and though not a drop of rain fell from the 8th of November 1873 to the beginning of April 1874, the bushes continued without watering fresh and healthy and threw out a constant supply of leaves enough to feed a considerable number of silk worms. In 1873 samples of raw silk, the result of Dr. Mackenzie's trial, were sent to experts in Glasgow, London, and France. Their opinions and suggestions were closely alike. The thread was bright in colour and had good nerve; it had been much spoiled by bad recling. The

¹ Silk in India by Mr. J. Geoghegan, Under Secretary to the Government of India (1872), 27-41.

highest value of the sample was 12s. (Rs. 6) the pound; had it been properly reeled it would have been worth £1 4s. to £1 5s. (Rs. 12-121) the pound. The experts considered that the sample showed that Bombay was in a better position for growing silk than Calcutta. In April 1874, Dr. Mackenzie, while noticing these favourable opinions, wrote to the Bombay Government that successful silk growing in Dharwar would depend entirely on European supervision, and that he found on inquiry that, even at the highest rates fixed by the European experts, there would always be a demand in the Bombay Presidency, in Bangalur, and elsewhere for such silk without the trouble and expense of sending the produce to Europe. The Bombay Government considered that the climate and soil of Dharwar were well suited for silk growing and that Dr. Mackenzie's experiments gave a fair hope of success. They directed him to continue his operations with jail labour and to plant a plot outside the jail with mulberry, and granted him £50 (Rs. 500) for sundry expenses connected with the trial. In 1876 experiments were made to rear the tasar silk-worm, but owing to the small amount of silk cocoons obtained no important result was noted. Cotton has for the most part driven out silk, and, in Mr. Robertson's opinion, water is too far below the surface for irrigated mulberry tillage to pay.

In May 1873 Mr. E. P. Robertson, C.S., then Collector of Dharwar, asked the sanction of Government to start an experimental farm near the villages of Navalur and Lakhmanhalli about five miles south of Dhárwár. The farm was to be started on about seventy-seven acres and to be gradually extended to two hundred acres. Government gave their sanction and Mr. Shearer who since 1866 had conducted the cotton experiments in Dhárwár was appointed its superintendent. The land was obtained with some difficulty, and late in the season Mr. Shearer began work in 291 acres of land divided into seven plots. The land was broken with a plough and grubber that had been sent out by the late Marquis of Tweeddale through the Secretary of State. This machine was based on the wheel and lever principle. It had been planned by and made under the supervision of the late Marquis of Tweeddale when Governor of Madras (1842-1848). It was worked with one or two pairs of bullocks and though as light to work for the same depth as the country plough it had several advantages. When once set on a straight furrow it needed no holding. It turned out a furrow each time while the country plough merely displaces the soil on each side and generally leaves a ridge altogether unploughed; it could be used in soil moderately dry and could be regulated to depth and breadth to suit the bullock's strength, while the country plough cannot be worked in a too moist and heavy soil. The English plough fell into disuse because its repair required more skilled labour than the ordinary field tools. During the season the farm was increased to 103 acres. The cotton crop was a success, the acre yield varying from sixteen to seventy-five pounds of clean American, and from seventy to 154 pounds of clean local cotton. Want of rain

Chapter IV-Agriculture GARDENS. Mulberry.

EXPERIMENTAL FARM.

¹ Memorandum on Silk in India by L. Liotard, Department of Revenue and Agriculture, Government of India, 1883.

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Agriculture.
EXPERIMENTAL
FARM.

was the main cause of some of the smallest yields of American cotton. Besides cotton, a fine crop of sugarcane was obtained where the native growers had repeatedly failed, and successful attempts mere made to get a market oil from sunflower. The total cost during 1874-75 amounted to £165 (Rs. 1650) and the receints to £80 (Rs. 800), or a working loss of £85 (Rs. 850). In 1875-76 the area of the farm was raised to 109 acres all acquired at a cost of £760 (Rs. 7600) and the number of plots was raised from seven to nine. These nine plots were sown with food-grains, greens, cotton, safflower, and sunflower. The rains set in as usual and the crops promised well till August when the weather became unusually Occasional showers helped the crops till October when cutting winds joined with the drought destroyed all hope of a good vield. Still some crops did fairly, but the failure of the cotton and to great extent of the wheat and gram reduced the outturn to 16s. (Rs. 8) the acre. Peruvian guano was applied to half an acre sown with potatoes and the result was a yield of nearly one ton which realized £5 16s. (Rs. 58). The total working charges including assessment were £179 (Rs. 1790) and the total net loss was £85 (Rs. 850). In 1876-77, the famine year, the wheat crop, which is generally sown after the first burst of the north-east monsoon in October, was very hurriedly put in, as it was feared that, by delay, the scanty supply of moisture in the ground might be lost. In the neighbourhood of Navalur the seed came up well, but the easterly winds dried up the half-moistened soil. The wheat straw grew stunted and weak, and the grain was very light, some fields barely yielding as much as the seed sown. Cotton sowing began about the middle of August but the crop was never promising. The sowings of American cotton in three fields kept remarkably free from blight but they were weak and stunted. The yield from two of the fields was extremely light; in fact the cotton crop of the village was almost a failure. The income amounted to £150 8s. (Rs. 1504). In consequence of these repeated failures the farm was closed from the 1st of October 1877. Blights are rare and never so widespread as to affect the general

FAMINES.

1896.

1423.

140.

1424. 1471. harvest. Cotton occasionally suffers from mildew, and the grain crops are often damaged by insects, rats, and locusts. The earliest recorded failure of rain in the whole country south of the Narbada is the great Durga Devi famine, which began in 1396 and is said to have lasted nearly twelve years. This famine was caused by the total want of seasonable rain. Almost no revenue was recovered and a large proportion of the people died. In 1428 no rain fell and there was a grievous famine throughout the Deccan and the Karnátak; multitudes of cattle died from want of water. Ahmad Sháh Bahmani (1419-1431) increased the pay of his troops and opened public stores of grain for the use of the poor. In 1424 there was again a failure of rain and the country was much disturbed. The years 1471 and 1473 are described as seasons of exceptional distress. No rain fell and no crops were sown for two years. Many died and many left

In the third year, when rain at last fell, scarcely

¹ Grant Duff's Marathas, 26,

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1832.

another short two months famine is recorded, when grain sold at forty-two pounds (12 shers) the rupee. It is attributed to failure 'of rain and seems to have extended to Belgaum. In 1832 local failure of rain and the immigration of destitute people from the country north of the Krishna caused great scarcity all over the district. The price of grain varied from 24½ pounds (7 shers) in Hubli to 31½ pounds (9 shers) in Dambal, and in Dambal some of the poorest were reduced to eating grass. The rich in Hubli, headed by Appáráo Lokhande, subscribed for the relief of the poor, and Government remitted the grain tolls. Mr. Elliot, the Collector, issued an order forbidding forestalling and regrating, and requiring the dealers to bring their grain into the market. Ponds and other useful works were begun to provide labour for the poor.

1866.

In 1866 the district was again visited by famine, the result of a succession of bad seasons. Though the rains set in late a fair harvest was looked for until August, when rain held off and grain became both dear and scarce. People who had stores of grain were unwilling to part with them. The distress was most severe in Navalgund, Ron, and Dambal. In Dambal the distress was not the result of one year's bad harvest, but of a continual failure of crops for some three or four years. Many were reduced to beggary and still more left their homes in search of food, many with the object of returning when better times came, and a few with the object of never returning. On the other hand, there was a large influx of people from Belgaum, Bijapur, and At the end of September heavy and continued rain saved To afford relief to the sufferers works not requiring the crops. skilled labour were begun in the Dharwar, Navalgund, Ron, and Gadag sub-divisions. A special famine-works grant of £4000 (Rs. 40,000) was made by Government from local funds, and £350 (Rs. 3500) from Imperial funds. A special grant of £5000 (Rs. 50,000) was also given for the improvement of the high road from Tegur by Dhárwár to Harihar, and an advance of £1600 (Rs. 16,000) was promised to the Dharwar municipality to improve a large reservoir in the suburbs of the town. Considerable numbers of the poor thus found employment for several months, until the harvest was gathered, which the timely late rains of September and October saved. The old and infirm, who could not work, were fed by private charity at Dhárwár, Hubli, Navalgund, Nargund, Annigeri, Basápur, Bliadrapur, Gadag, Dambal, Karajgi, Háveri, Devihosur. By December distress had disappeared. The harvest, especially the grain harvest, was the best reaped for several seasons. At Dhárwar the rupee price of Indian millet fell from twenty-one in September to seventy-three pounds in December (6-21 shers); of millet from eighteen to sixty-eight pounds (51-191 shers); and of poor rice from twenty-one to thirty-nine pounds (6-114 shers).

1876-77.

The scanty and still more the ill-timed rainfall of 1876, 18.81 inches compared with an average of 26.89, led to failure of crops and distress

amounting to famine over about two-thirds of the district. The north and east suffered the most. In addition to the failure of the early crops, September and October (1876) passed with only a few showers, and very little of the late crops were sown. With high grain prices, Indian millet at 16% instead of forty-three pounds, and with little demand for field work, numbers of the poorer classes fell into distress. The need for Government help began early in September, when relief works were opened and paid for out of local funds. In the hot months of 1877 (March to June), with rising prices, the distress grew keener and more widespread. The failure of rain in July and August caused great anxiety and suffering, which were removed by the timely and copious rainfall of September and October. The condition of the people rapidly improved, and by the end of October distress had disappeared. At the close of November the demand for special Government help had ceased.

The following details show, month by month, the state of the district and the measures taken to relieve the destitute. In September 1876 as the rain still held off, except in the west and in lands which could be watered, the early crops perished. Grain prices rose, jvári being sold at Ron, about the middle of the month, at thirty-two pounds the rupee. Water was growing scarce and fodder was difficult to procure. Owing to the want of rain the fields could not be prepared for the cold-weather crops, and, early in the month, the demand for work became general, and many of the poorer classes left the district. To give employment to the destitute, the digging of the Navalgund lake, and the making of the Dambal-Hesrur road, were started. About the close of the month, a fall of rain, 2.9 inches in Dhárwár, 2.14 in Navalgund, 2.5 in Kod, and 1.5 in Karajgi, did much good to what scanty early crops were standing. Elsewhere, though the fall was lighter, the people were encouraged to sow late crops, and drinking water became available in many places where it was urgently wanted. In spite of this relief, the demand for employment continued general. October passed with only a few showers. In Ron and Dhárwár, where the fall was good, late crops were sown, but the early crops everywhere grew worse, and cotton, where it was sown, was fast perishing. Juin prices rose to about thirty pounds the rupce, and in Dharwar, Karajgi, and Gadag many dealers refused to sell. Besides the want of grain, there was in some places great scarcity of drinking water and fodder. Local fund works gave employment to many of the destitute, and others, especially in Ranchennur and Gadag, were supported by the well-to-do. On the 17th, Government placed a sum of £2500 (Rs. 25,000) at the Collector's disposal for charitable relief In November little rain fell, and there was no improvement in the crops. People took their cattle and left in large numbers for the Kanara forests. There was great suffering especially in Ron where many villages were desorted. Fodder and water were scarce, and, especially in the north, large numbers of cattle died. In spite of grain imports from

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The estimate was in area 3000 square miles of a total of 4561, and in population 630,000 out of 988,037.

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Sholupur, juari rose from thirty to 13½ pounds. And, though the harvesting of the early crops in the western sub-divisions gave a good deal of employment, the daily number on relief works rose from 4000 to 21,361. Of 10,005, the average daily number for the month, 8210 were able-bodied, expected to do a full day's work and superintended by ordinary public works officers, and 1795 were aged or feeble expected to do two-thirds of a day's work and superintended by mainlatdars and assistant collectors. December passed without rain and with no change in crop prospects. Harvest work in the west was nearly over, and, though some were coming back disabled by the climate, people and cattle continued to move in large numbers to the west of the district and to the Kanara forests. Fodder rose in price and in Navalgund was very scarce. Grain was imported in large quantities, the chief difficulty being the cost of carriage, cart rates botween Kárwár and Dhárwár having risen from 14s. (Rs. 7) to £1 2s. (Rs. 11). The rupeo price of jvári fell from fifteen pounds at the beginning of the month to nineteen pounds about the close. Late in the month cholera broke out in four of the western sub-divisions. The numbers of the destitute considerably increased, on public works from 8210 to 19,432, against a fall on civil works from 1796 to 1011.

1877.

In January there was no rain and no change in crop prospects. Many were returning unable to stand the climate, but the migration of people and cattle to the Kanara forests and to the western sub-divisions still went on. The importation of grain continued fairly steady at eighteen pounds the rupee *jvári* keoping In Ron, Gadag, and Navalgund fodder was scarce and people were bringing it from the Nizam's country. In the north the people suffered most from want of water. Cart rates from Kárwár to Dharwar, after rising early in the month to £1 7s. (Rs. 131), fell about the end to £1 (Rs. 10), and, to help the traffic, wells were dug along some of the grain trade routes. The numbers on relief works rose, on public works from 19,432 to 30,396, against a fall on civil works from 1011 to 792. There were 184 persons on charitable relief. February passed without rain and with no change in crop prospects. There was much movement among the people. Upwards of 20,000 passed west, while many, some of them belonging to Bijápur, came back from Kánara and Belári. In spite of large grain importations, jvári rose from 181 to 171 pounds the rupee. Fodder was extremely scarce. In parts of Gadag cattle were fed on nimb tree leaves, and large quantities of rice straw were brought from Kánara. Cholera continued prevalent. The numbers on public works fell from 30,396 to 26,973, against a rise on civil works from 792 to 1481; on charitable relief they rose from 184 to 257. The fall on public works and the rise on civil works was because the people left the public works owing to cholera, and,

¹ The rates of wages originally fixed for the workers were, for a man 3d. (2 as.) a day, for a woman 2dd. (1\frac{1}{2}as.), and for a boy or girl 1\frac{1}{2}d. (1 a.) About the middle of November a sliding scale was introduced, which provided that, when prices rose over sixteen pounds the 1upec, the money rate should vary with the price of grain, and that a man should always receive the price of one pound of grain in addition to one anna.

losing condition from want of food, had to be taken into relief kitchens and on to civil works. On the 14th, to help the grain traffic, grass was brought to Gadag at Government expense. In March no rain fell. Many immigrants from Bijapur and elsewhere left the district, and emigrants to the Kanara forests came back with their cattle. About the end of the month cart rates between Kárwár and Dhárwár rose to £1 6s. (Rs. 13). This greatly crippled the grain trade and the rupee price of jvári rose from 181 to 161 pounds. Cholera was provalent and increasing. The numbers of the destitute rose, on public works from 26,973 to 29,712, on civil works from 1481 to 2385, and on charitable relief from 257 to 767. During the latter part of April there was an average rainfall over the district of 2.01 inches. People continued to move about in large numbers. Some of them were strangers from Belári, Bijápur, and Bángalur; others were Dharwar people on their way back from the Kanara forests. Ploughing was everywhere in progress. In some parts of Dharwar, Karajgi, and Ránebennur, baragu Panicum miliaceum, navani Panicum italicum, save Panicum miliare, and other fast-growing crops were sown. For a time the cart rates from Kanara to Dharwar fell to £1 4s. (Rs. 12). Soon after, as the Dhárwár bullocks were engaged in field work, carriage was difficult to get, and cart-hire from Dhárwár to Kárwár rose to £1 12s. (Rs. 16), and further checked the import of grain. The rupee price of jvári rose from sixteen pounds at the beginning to fifteen pounds about the close of the Cholera, though very severe in Kalghatgi, was decreasmonth. ing. The immigrants found employment in large numbers on the relief works. Relief houses, where the infirm poor were fed twice a day, were opened over the greater part of the district. numbers on relief rose, on public works from 29,712 to 38,999, on civil works from 2385 to 3003, and on charitable relief from 767 to 1989. On the 24th, a further sum of £1000 (Rs. 10,000) was placed at the Collector's disposal for charitable relief. In May a good deal of rain fell. Except in the east and north, sowing operations went on rapidly. In the west the baragu and other quickgrowing crops, which had been sown in April, were in good condition. In Dhárwár, Kalghatgi, Bankápur, and Hángal, rice, and at Mundárgi in Gadag bájri and jvári were being sown. People from Bijápur and the eastern sub-divisions were moving west, tempted by the cheaper rate of grain and the better supply of water; others were coming into the south of the district from Belári and Maisur. In the red soil districts green grass had sprung up. But in the black soils fodder was still rising in price, and no fodder but leaves and very old straw was available. Cart-rates from Kárwár to Dhárwár rose to £2 (Rs. 20), and grain importations were very small. rupee price of jvári rose from fifteen to fourteen pounds. The people supplemented their supply of grain by tamarind seeds and various edible herbs, which were largely sold in the markets. Cholera continued prevalent, but was decreasing. The numbers on relief rose, on public works from 38,999 to 50,598, and on charitable relief from 1989 to 3088. On civil works there was a fall from 3003 to 2371.

In June there was an average fall of about 5:11 inches of rain. Large numbers returned to their homes in Bijapur, Belgaum,

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Sátúra, Belári, Maisur, and the Nizám's country. The sowing of the early crops was general except in some parts of Ron and Navalgund, where but little rain had fallen. The harvesting of the quick-growing crops was begun in Bankapur, Karajgi, and Ranebennur. At Mundargi and in the western sub-divisions, the poor were earning a little by bringing green grass to market. Cart-rates from Kárwár to Dhárwár, after rising in the beginning of the month to £4 (Rs. 40), fell, about the close, to £3 4s. (Rs. 32). So high were the rates that importation was almost at a stand. Jvári prices rose from 12½ to 10½ pounds the rupee. The numbers on relief rose, on public works from 50,598 to 53,851, on civil works from 2371 to 3469, and on charitable relief from 3088 to 3300. July passed with only a few showers, chiefly in the west. The early crops were everywhere withering and sowing operations kept back. In Hubli, Bankápur, Ráuebennur, Karajgi, and Kod the quick-growing crops were harvested. People again began to move from the east westwards. Cart-rates from Kárwár to Dhárwár rose at the beginning of the month to £4 16s. (Rs. 48), the high rates seriously interfering with grain importation. Later on men were employed to draw carts at the rate of 10s. (Rs. 5) for each bag of grain brought from the coast. This competition was most useful, and cart-rates fell to £3 4s. (Rs. 32).2 Still jvári prices rose from ten pounds at the beginning of the month to 8½ pounds at the close. The numbers on relief fell considerably, on public works from 53,851 to 21,532, on civil works from 3469 to 2581, and on charitable relief from 3300 to 1487. This fall was probably due partly to the people's unwillingness to camp out during the rain, the huts provided being hardly ever watertight, and partly to the hope of regular field work. In August there was a considerable (2.88 inches) but ill-distributed fall of rain. In the beginning of the month the supply was very scanty, and, especially in Ranebennur and Kod in the south, the crops were perishing. The people kept moving to the west, and strangers continued to flock into the district. The importation of grain by human labour was continued, and the cart-rates from Kárwár to Dhárwár fell to £2 8s. (Rs. 24). Jvári prices rose from 94 pounds the rupee in the beginning of the month to 8½ pounds about the close. In the last days of the month more or less rain fell in every sub-division, and, except in the south, the early crops revived. the eastern sub-divisions and in Ron the sowing of the late crops was begun. The numbers on public works slightly rose from 21,532 to 21,743, against a small fall on civil works from 2581 to 2355. On charitable relief the numbers rose from 1487 to 1982. In September an average of 7.79 inches of rain fell. The prospects of the early crops improved, but in Hangal and Kalghatgi more rain was required for the rice. The sowing of the late crops and cotton was in progress, and the crops already sown were in good condition. In some places the harvesting of the early crops was begun. Early in the month people moved towards the western subdivisions, some passing to Kanara; but the movement soon ceased and before long they began to return. About the middle of the

¹ The rates from Dhórwár to Kárwár at these two periods were Rs. 20 and Rs. 16.
² The rates from Dhárwár to Kárwár at these two periods were Rs. 20 and Rs. 12.

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to 24,098 in August, rose in September to 32,857, and again rapidly fell to 2065 in November, when the works were closed. The numbers on charitable relief rose steadily from 184 in January to 3300 in June. They then fell to 1982 in August, and, after rising to 3366 in September, fell in November to 1076, and in December to 122:

Dhárwar Famine, 1876-77.

,		AVE	RAOR DAI	LY NUMB	BRS.	AVERAGE	
Mortu.		Re	lief Work			Ruper Prices.	RAINPALL
		Civil Agency.	Public Works.	Total	Charity.	Jráti.	
1876.						Pounds.	Inches.
November December	•••	1796 1011	8210 19,432	10,005 20,443	***	163 171	•••
1877.							
January February	•	792 1481	30,396 26,978	21,188 28,454	184 257	181 171	***
March April	***	2385 3003	29,712 38,999	82,097 42,003	767 1089	171	2-01
May	•••	2371	50,593	52,909	3098	14	2.21
June July	••	3469 2581	53,851 21,532	57,820 24,113	8300 1487	111	5·11 •51
August September	**	2355 3567	21,748 29,200	24,098 32,857	1982 3306	12 81	2·88 7·79
October November	•••	2522 731	14,879	17,401	3109 1070	183 281	10 05
December	•••	731	1334	2005	122	201	
Total	•••	28,003	346,949	875,012	20,727		30 70
Average	••	2159	25,019	28,078	1723		***
Total Cost	•••		Rs.	12,67,961	78,709	···	
L]		1,341,670		}	1

Special Measures. The only special relief measure was helping the hand-loom weavers. In May 1877 Government sanctioned a sum of £150 (Rs. 1500) for their relief. Through their own moneylenders, who voluntarily undertook to advance them yarn and wages, weekly orders were given to the weavers. The coarse cloth manufactured was bought through the moneylenders by Government at such rates as to cover the actual cost of yarn and wages paid in advance. The outturn was used to meet the demand for cloth in the different Government offices, and also in giving clothes to destitute persons on relief works. In September 1877 this special relief was stopped.

Census.

A special census taken on the 19th of May 1877, when famine pressure was general and severe, showed that of 45,711 workers, 41,583 on public and 4128 on civil works, 25,381 belonged to the sub-divisions where the works were carried on; 13,398 belonged to different sub-divisions of the same district; 4656 were from other districts; and 2276 were from neighbouring states. As regards occupation, 2521 were manufacturers or craftsmen, 12,588 were holders or sub-holders of land, and 30,602 were labourers.

Cost.

The total cost of the famine was estimated at £134,167 (Rs. 13,41,670), of which £126,796 2s. (Rs. 12,67,961) were spent on public and civil works, and £7370 18s. (Rs. 73,709) on charitable relief.

The rates of cart hire from Gadag to Kárwár varied from £1 4s. (Rs. 12) from November 1876 to February 1877 to £3 10s. (Rs. 35) from July to October 1877. In Navalgund and Ron the daily cart rates before the famine varied from 1s. 6d. to 1s. 9d. (12-14 as). In Navalgund these rates continued till March 1877, after which from July to Docember, they rose as high as 4s. (Rs. 2). In Ron cart rates began to rise from the beginning of the famine (November 1876), until, towards the close of the famine, they were 2s. 6d. (Rs. $1\frac{1}{4}$) or nearly double the ordinary rate. In Hubli the daily cart rates rose from 2s. 6d. in the beginning of the famine to 4s. between July and October (Rs. $1\frac{1}{4}$ -2), after which they fell to 3s. 6d. (Rs. $1\frac{3}{4}$) from November to December 1877. In Ránebennur the ordinary daily cart rate was 2s. (Re. 1); except from January to March when they fell to 1s. 9d. (14 as.), the rates remained throughout as high as 3s. (Rs. $1\frac{1}{4}$).

Twenty-seven relief houses were opened for periods varying according to the local distress. Except the relief house at Dhárwár which was opened in April 1877 and closed in March 1880, no relief house was open for more than a year. The times during which thoy remained open were at Ránebennur from January to December, at Hubli from March to December, at Naregal from the 29th of April to the 2nd of June, at Hangal, Haveri, and Bankapur from April to December, at Annibhavi from the 17th to the 31st of May, at Sudikavjarji, Álur, Betigeri, Mugod, and Biádgi, and two at Kalkeri from May to June, at Lakundi and Misrikota from May to July, at Dambal from May to October, and in Kalghatgi from May to November; at Hubli during June, at Ron from June to November, and at Navalgund from June to December; at Gadag from July to December; at Nargund from August to December, and at Tadas and Annigeri from September to November. At these houses 471,815 persons were relieved at a cost of £6232 The relief houses were temporary sheds, private (Rs. 62,320). houses, monasteries, temples, and cotton-gin factories. At Naregal seven miles south of Bankapur a private relief house was kept open from the 3rd of June to the 15th of August 1877, and 1845 persons were relieved at a cost of £92 (Rs. 920).

In addition to their ordinary duties the assistant collectors and district deputy collectors were placed in famine charge of their sub-divisions. Hubli, Kalghatgi, and Bankapur were in charge of the first assistant, Ranebennur, Karajgi, Hangal, and Kod were in charge of the second assistant, and Ron and Gadag were in charge of the district deputy collector. From April to October Navalgund and Dhárwár were placed under a special officer, Mr. E. J. Ebden, C.S. Special relief officers were appointed at Gadag from March to October and at Bankapur from March to July. Under these officers there were mamlatdárs, clerks, and circle inspectors. Mr. Walton, the cotton inspector, was employed on civil relief works from April to November, and Mr. Young of the revenue survey from about July to October. No shops for solling grain to the poor were opened on Government account. A municipal shop was opened at Dhárwár for a fow days, and at Navalgund a shop was opened between the

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Relief Houses.

Relief Staff.

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27th of October 1876 to the 20th of April 1877 out of a subscription of £500 (Rs. 5000) raised by the well-to-do.

¹ Grain was brought from Bombay through the ports of Karwar and Kumta in North Kunara and to a small extent through Belgaum from Vengurla in Ratnágiri. Somo also came by rail to Belári and from Belari by cart. Almost the whole of the imported grain was jran, brought by sea from Sind and by rail from Jabalpur. The Sind ir iri was bought at the ports by dealers of all classes, the largest importers being the capitalists of Hubli and Gadag, who in ordinary seasons deal in cotton. The chief grain markets were Hubli, Gadag, Dharwar, Haveri, Bankapur, and Ranebennur. The grain was paid for largely by gold and silver. The landholders' capital in the form of ornaments poured into the markets and the goldsmiths' melting pots were going day and night. The course of trade was from the Kanara coast east and north. South Bijapur was largely fed through Dharwar. In the northern sub-divisions of Dharwar, Navalgund and Ron, the grain-dealers made no attempt to force prices by keeping back their stocks. At Ranobennur they refused to sell about November 1876, and to some extent in Hubli, Gadag, Bankapur, and Kalghatgi early in 1877. Importations of foreign grain forced them to open their stores. The chief special difficulty in Dharwar was the number of immigrants, who in the first stage of the famine (September-October 1876) flocked into the western forests on the Kanara frontier, and afterwards were constantly streaming back diseased and dying. Small-pox and fover killed them in numbers. In February 1877 a special officer sent to enquire into their number and condition, reported that there were probably about 20,000 in west Dharwar and east Kanara. They came chiefly from Bijapur, but many could speak nothing but Marathi, and some could speak only Telugu. This migration was probably in obedience to a tradition of former famines, that water and food, bamboo seed, wild yams, and other forest produce were to be had in the maladu or hilly west. When the charity of the frontier villages was exhausted and the immigrants found that disease and cold gathered as many victims as hunger, and also heard of relief works, they gradually came back to the relief centres which were opened along the western frontier specially to catch them. They were employed by thousands and fed into condition by hundreds, and, on the first rainfall in May, when they began to want to go home, arrangements were made to pass them home by having stores of food at halting places on the main routes. A very large number were regularly marched in gangs. After the heavy rain in June they passed through Dharwar and Nargund to Bijapur in a continuous stream soaked with rain and caked with mud to Their only portable property was some of the their middles. Government relief-house sancers, earth-work baskets, and here and there a stolen pickaxe. Another difficulty was the failure of bullock power to draw the grain carts from the coast after the rain fell. This failure was due to the bullocks being wanted for

field work, to the bullocks not being able to stand the wet on the Sahyidris, to their not being able to draw the carts through muram roads deep as a ploughed field, and to bullock power being cut off from the made roads by intervening tracts of black soil. After July men to a great extent took the place of bullocks, dragging earts where there were roads, and, where earts could not travel through the roadless black soil carrying the grain on their heads. There were also difficulties in getting people to go to the particular works to which they were drafted. In some cases they received allowances to go and deserted on the road. The northern subdivisions of Roa, Navalgund, and Dhárwár suffered from want of water and some help was given for deepening wells. Hutting for famine labourers was difficult to arrange; no grass could be had for thatching, and the bamboo mats or tattic which were used in the place of grass were not rain-proof.

Few people left the district, though thousands went from the cast to the west and some passed over the frontier into North Kanara. There was some little inigration into Belfiri and Maisur from the neighbouring villages drawn to Belári by the easy terms on which relief was given, and, in the later stage of the famine, to Maisur drawn by the neurness to their homes of come of the Maisur relief works and perhaps by more liberal treatment. Compared with 1872 the 1881 census shows a fall of 106,764 in population. The addition of the normal yearly increase of one percent during the remaining seven years gives 175,000 as the loss of population caused by death and migration in 1876 and 1877. During the first six months of the distress the behaviour of the people was good. They were patient and reasonable, and showed many fine traits of kindly feeling. This lasted so long as families kept together. Towards the end of the hot weather (May 1877) early rain fell, the people were unsettled by the hope of field work and of a speedy end to their miseries, and those who had not submitted to the steady discipline of relief work but were living partly on alms grew demoralized. Pamilies began to break, men left their wives and children, and the lazy used every device to get relief without giving work. The esculent vegetables that sprang up helped to stave off hunger from those who would not work. Private charity grew less and less, and at last when in July there were prospects of another year of famine it ceased. I'rom these causes mendicancy, combined among the Lambinis with thicking and housebreaking, increased through May, June, July, and August. Especially in July and August swarms of people who would not work had lost all care for life or for decency and were unmanageable. Two men, unable to stand, brought to the Dharwar relief house by the police, were given grain tacks to cover their nakedness and were fed for two days. The record night both evaded the watchmen and left. On the record day one was found dead and maked, the other was brought in on the third day dying. He said they had sold the bags for a copper or two, and wandered round picking up refuse. They could not endure being made to live decently. This is one case out of hundreds. The people who starved at home were few compared with those who wandered. The stay-at-homes could always be found Chapter IV.
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Liveration.

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beginning of British rule the value of the gold hun was fixed by Government at 7s. (Rs. 31), being 1s. (8 ac.) less than the general market rate of Sr. (Rs. 4). Besides the hous, there were of gold mohars the Company's mohar valued at C1 10s. (Rs. 15) and the Akbari mohar valued at £1 12s. (Rs. 16), and also a rare Ram tenki valued at £8 (Rs. 80), and Padma and Hanmant tenkis each valued at £1 16s. (Rs. 18).2 A full Ram tenki weight about 15th of a pound (4 tolas) of gold; a half Ram tenki, also called a pratup, about 75th of a pound (2 tolds); and a quarter Rim tenki, also called dharns, about 3 th of a pound (1 tola). Of small gold coins there were hanas or fallams equal to one-fourth of a varah or 2s. (Re.1).

Of silver coins, till about 1810, besides the Company's rupes, thirteen rapees were current in Dharwar. Of these for every 100, the Bombay and Surat rupees were cashed at 102 Company's rupees, the aurangabad and bagalkot at ninety-nine, the aukusi at ninetyseven, the poona at ninety-six, the shahapur at ninety-two, the killur chahapur at ninety-one, the dharwar at ninety, the haidarabad at eighty-eight, the pandli in Kolhapur at sixty-five, the nilkanti at fifty-five, and the bhulpadi at twenty-seven.

Till 1835-36, when the Company's copper pice were introduced, of copper coins the shifty poise called duddy and its submultiple ruri were current in Dharwar. The shahu paisas are said to have been coined at Satara by king Shahu, the grandson of Shivaji (1708-1750). Three ravis were equal to one duddu; duddus were counted by takkis in Marathi and by tenkis in Kanarese, each containing sixteen duddus. Three tenkis or forty-eight duddus, of which one was equal to & anna of the present currency, went For about twenty years between the to a Company's rupec.

elephants predominated. The have struck by the Maisur kings are said to have been called gajpatic. Of other huns the sameheri, meaning a word in Persian, is raid to have been struck by a Musalman chieftain, the alargiri by the emperer Autangreb, the kanterdyi by an ancestor of the Maharaja of Maisur; and the hanglei, districtif, calculating hims and stranger in the towns of these names. The table used in calculating hims and the submultiples of hims was two lands one arrive, two arrives one rise, two rises one high, two bidles one dupla, two duples one dulle, two chaulds one dharms, two dharms one produp, and two protops one full rarch. The rarch was generally considered equal to 8s. (18s. 4) and the unit or last submultiple leads one of the rarch to 8 25% but of a result to 8 25% but of a r

thrile was generally considered equal to 81. (18, 4) and the unit or last submultiple kani equal to a 256th part of a variab or \$d. (10.).

During this period the chief Collector of Dhármár who was appointed from the Madras Civil Service and paid in huns or pagedias, received for his monthly salary of £350 (18, 3500) 1000 huns at the Government into of 7s. (Rs. 34) the hun; he every month made a profit of £50 (18, 500) over his salary by selling the huns at the

market rate of 84. (R4. 4).

2 Tenli, corrupted into Persian and Maráthi talla, means a coin in Kanarese. Thus the Ram tenli means a coin struck in honour of the god Ram, the Padam tenli a coin struck in honour of Padamávati, the second wife of the god Venkatraman of Tirupati, and the Hannant tenki a coin struck in honour of the god Hannant, the devoted servant of Rom.

The table used in calculating the hand and its submultiples was two lands one

arrisa, two arrisds one risa, two rieds one childiali, two childialis one hana, two amis one adda, and two addas one hana. The unit or last submultiple kani for hana is the same as that for rardh heing equal to \$d. (\frac{1}{4} a.).

*The table used in calculating the rupes and its submultiples was two quarter annas one half anna, two half annas one anna, two annas one charli, two challis end

parli, two parlie one adheli, and two adhelis one rupee. The unit or last submultiple one quarter anna is equal to gd.

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beginning of the British rule in 1817 and the introduction of the Company's copper coin in 1835-36, all Government accounts were kept in rupees, quarters, and res. One hundred res made one quarter, and four quarters one rupoe. During this period the people kept their accounts in rupees, quarters, annas, and quarter annas, a quarter anna being considered equal to 61 res. After the introduction of the new copper coinage in 1835-36 all Government accounts were kept in rupees, annas, and pics. The bulk of the people still (1883) keep their accounts in rupees, quarters, annas, and quarter annas, a quarter anna being divided into three pics. At present (1883), except in a few private transactions where Dharwar huns are used, the Imperial rupce which weighs 180 Troy grains, and the Imperial copper pice, which weighs 100 Troy grains, and their submultiples are the current coins of Dharwar. The people calculate still in Dharwar or Ikkeri huns, while all payments are made in the Imperial rupee at the market rate varying from 8s. to 8s. 6d. (Rs. 4-41) the hun. The kardis or shells which are used in Poona and Satara as fractions of copper coins, are not current in Dharwar and the other districts of the Bombay Karnatak.

For the ordinary numbers up to ten thousand, when he strikes a bargain he wishes to keep secret, the Dharwar moneychanger uses the following terms as cipher numbers. In this moneychanger's language pakár means 6d. († rupec), armatta 1s. († rupec), uddán pakár 1s. 6d. (3 rupce), yekkal matta 2s. (Rc. 1), ávár 4s. (Rs. 2), ishvar netra 6s. (Rs. 3), phoka or ved 8s. (Rs. 4), bán 10s. (Rs. 5), selli 12s. (Rs. 6), pavitra 14s. (Rs. 7), tál 16s. (Rs. 8), naval 18s. (Rs. 9), artar £1 (Rs. 10), árár artár £2 (Rs. 20), netra dasak £3 (Rs. 30), mandal £4 (Rs. 40), addu £5 (Rs. 50), sanvatsar £6 (Rs. 60), pavitra dasak £7 (Rs. 70), kodgi £8 (Rs. 80), naval dasak £9 (Rs. 90), shalak £10 (Rs. 100), árár shaluk £20 (Rs. 200), bána shalak £50 (Rs. 500), dhagár £100 (Rs. 1000), bána dhagár £500 (Rs. 5000), and aviár dhagár £1000 (Rs. 10,000).

Of these cipher numbers some are Kannerse and some are Sanskrit number names, others are symbolic or arbitrary. Taking them in the order given in the text paldr a quarter is the letter p in Sanskrit and ro is taken to stand for path a quarter rupee; armatia a half rupee is the Kanarese ar half and unatta rupee; adda paldr three-quarters of a rupee is the Kanarese uddan three and pakar taken to represent path one-quarter; yellal matta one rupee is the Kanarese yellal one and matta a rupee; drdr two rupees is the Sanskrit drar the next or two; inhear netra three rupees is symbolic, literally meaning in Sanskrit Shiv's eye of which there were three; phola or red four rupees, phola is the Kanarese four, red is symbolic as there are four reds; lan five rupees is the Sanskrit bin arrow symbolic of five because Kanneres relli six; parters seven rupees is the Sanskrit paratra pure, as the number of the Rishis stands for seven; tall eight rupees is tall the Kanarese eight; nared nine rupees is the Sanskrit ner nine; artarten rupees is the Sanskrit artar and artar twenty rupees is the Sanskrit drar two and artar incarnation; netra-dashak thirty twenty rupees is the Sanskrit drdr two and arter incarnation; netra-dashak thirty twenty rupees is the Sanskrit drift two and all dr incarnation; netra-damae thirty rupees is the eye that is Shiv's eyes or three and darhal the Sanskrit dash ten rupees; mandal forty rupees is the Sanskrit mandal forty; addu fifty rupees is Kansrese apparently originally the Maráthi ardha or half that is half a hundred; sanuatar sixty rupees is the Sanskrit sanvatar a year and so sixty because years are in cyclem of sixty; praire-dashak seventy rupees is as explained even-tens; holgi eighty rupees is the Kansrese holgi eighty; naval dasak ninety rupees is as explained nuncture; shalak a hundred rupees is the Sanskrit shalak a hundred; and dhagdr a thousand supers is the Kansrese haggies the Sanskrit shalak a hundred; and dhagdr a thousand supers is the Kansrese haggies the Sanskrit shalak a hundred; sand supers is the Kanarche dhagar a thousand.

Chapter V. Capital. Bankers.

Except a few moneylenders and the Hubli branch of the Bombav Bank, there are few bankers in the district. Hubli is the only place where banking operations are carried on to any large extent. The bankers are moneylenders, chiefly Lingáyats, Jains, Bráhmans, and Komtis by caste. The ordinary banking business at Hubli consists of buying bills representing the value of cotton shipped from Kumta and Karwar and of drafts for the payment of piece-goods and other imports from Bombay. Of late years there has been little change in the local system of banking. The banking business of Hubli suffered severely from the 1876 and 1877 famine, and since then the old practice of the bankers or savkars advancing The Branch of the money to landholders has almost ceased. Bank of Bombay at Hubli was opened in 1870.1 The effect of opening a branch of the Bank of Bombay in Hubli has been to cheapen money. The chief business of the bank is the buying of bills drawn on Bombay by the purchasers of Dhúrwar cotton. Government too, by transfers to the Bank, is able to remove its surplus revenue to Bombay free of cost and occasionally at a small profit. The Bank has few or no native depositors. The rearly dealings of the bank average £300,000 to £400,000(Rs. 30,00,000-Rs. 40,00,000) with Europeans and £150,000 to £200,000 (Rs. 15,00,000 - Rs. 20,00,000) with Natives. To a small extent the bank advances money to European cotton-buyers. Most of the funds invested in the trade of Hubli belong to Bombay; the share of the Hubli traders is very small. The chief traders are eight to ten firms of Bombay Bhátiás and Gujarát Vánis.

Bills.

No local firm deals regularly in exchange bills. Two or three Brahman and Lingayat merchants at Dharwar, and about ten at Hubli, grant bills of £500 to £1000 (Rs. 5000-Rs. 10,000) on Bombay, Poona, Madras, Belári, Bangalor, Kumta, and Kárwár. Besides these local dealers in bills, the Bhátiús, who have come as traders from Bombay within the last ten years, are all able to cash bills up to £1000 (Rs. 10,000). At Gadag a well-known Gujar merchant, named Venkatidás, grants and cashes bills up to £1000 (Rs. 10,000). Bosides at Dharwar and Hubli, some rich local Brahman and Lingayat merchants, though they do not deal in bills, occasionally grant bills on Bombay and Kumta. During the cotton season, that is from November to March, dealers require funds for the purchase of cotton. They grant bills on Bombay and receive funds from local bankers at one or two and sometimes at three per cent discount, that is they grant bills for £10 (Rs. 100) and get only £9 18s. (Rs. 99), £9 16s. (Rs. 98), or £9 14s. (Rs. 97). During the rains, that is from May to October, little is done in cotton beyond making small cheap purchases which are held till October. Little money is required for the cotton trade, and to pay for the cloth, food, and miscellaneous imports, which go on to a small extent from Bombay, bills rise to par and sometimes to one per cent premium.

INSURANCE.

No kind of insurance business is carried on in any of the Dhárwár trade centres.

¹ In the town of Dhárwár a branch of the Bank of Bombay was opened in 1863, It was closed in November 1878, business being diverted to its Hubli Branch.

The classes of townsmen who save are traders, large landholders. moneylendors, some pleaders, and the higher officials. Among the lower classes, shephords, servants, and shoemakers are generally able to save in ordinary years. During the American War (1863-65), whon large sums of money poured into the district, the purchase of land and of houses at very high prices led to many disputes. The people were rich enough to rush into court, and the pleaders, of whom there was then a comparatively small number, made large sums. Since then the famine of 1876 and 1877 and the duliness of trade which followed the famine reduced the number and still more the value of suits. At the same time the number of pleaders has increased. These causes have joined to lower the condition of the pleaders as a class. All still dress well and live expensively and some either from hereditary property or because they are specially successful are rich and lend money. Others find it hard to keep out of debt. Of villagers, moneylenders, shopkeepers, and large landholders save; but they spend most of their savings in marriage ceremonies and in caste dinners. Of the lower classes, shepherds, shoemakers, servants, and others save, but their savings are often lost by their practice of burying them in some place which they keep secret oven from their nearest friends. Among the higher classes, especially among Brahmans, the savings made in ordinary years are spent on marriage expenses. Within the last twenty years the amount of money spent on marriage feasts and shows has been greatly reduced. On the other hand the practice of the girl's father paying large sums to the bridegroom and of giving the bridegroom rich presents has been introduced and has brought many families to poverty. This practice does not prevail among Lingayats and they perhaps save more than any class in the district.

No investments in Government securities have ever been made by the people of Dhárwár. Not a single native has deposited money in the Hubli branch of the Bombay Bank. Of late a few traders and other classes have invested money in trading jointstock companies which were started at Dharwar in 1876, and at Hubli in 1878, and in the Hubli inill started in 1883. In the Savings Bank the depositors are almost solely Government officials. No shopkeepers, weavers, carpenters, or any other class of the general people have yet deposited money in savings or other banks. During the thirteen years ending 1882 the Savings Bank deposits rose from £2391 in 1870 to £8187 in 1882. The details are £2391 in 1870, £4146 in 1871, £1706 in 1872, £6014 in 1873, £2277 m 1874, £2764 in 1875, £2265 in 1876, £2016 in 1877, £2115 in 1878, £4458 in 1879, £9201 in 1880, £6222 in 1881, and £8187 in 1882 The changes in the amounts deposited seem to be chiefly due to changes in the rules regarding the amount to be deposited and the interest granted. The increase in deposits from £2391 (Rs. 23,910) in 1870 to £6014 (Rs. 60,140) in 1873 seems connected with an Chapter V. Capital.

INVESTMENTS.

t Of about fifty pleaders in the Dharwar courts two or three make £30 to £40 (Rs. 300-400) a month; ten make £10 to £20 (Rs. 100-200); ten £5 to £10 (Rs. 50-100), and the rest hardly £3 (Rs. 30). Ray Baladur Turnalrae.

Chapter V. Capital. INVESTMENTS. order passed in 1871 raising the limit of deposits from £150 (Rs. 1500) to £300 (Rs. 3000); the fall from £6014 (Rs. 60,140) in 1873 to £2115 (Rs. 21,150) in 1878 seems due to an order passed in 1874 limiting deposits to £100 (Rs. 1000) and the amount to be deposited in any one year to £50 (Rs. 500); the large increase from £2115 (Rs. 21,150) in 1878 to £9201 (Rs. 92,040) in 1880 seems due to an order passed in 1879 mising the interest on deposits from 31 to 41 per cent a year and the limit of deposits to £500 (Rs. 5000); the fall to £6222 (Rs. 62,220) in 1881 seems due to an order issued in 1881 lowering the interest to 37 per cent and the limit of deposits to During the thirteen years ending 1882 the £300 (Rs. 3000). interest paid on Government securities increased from £33 (Rs. 330) in 1870 to £537 (Rs. 5370) in 1882; the highest amount of interest paid was £997 in 1877. The details are: £33 in 1870, £391 in 1871, £228 in 1872, £238 in 1873, £423 in 1874, £678 in 1875, £213 in 1876, £997 in 1877, £910 in 1878, £199 in 1879, £328 in 1880, £195 in 1881, and £537 in 1882.

All classes, whether townspeople or villagers, invest part of their sayings in ornaments. Land is also a favourite investment. Before the 1870 famine land was difficult to get except at very high prices. The famine forced many husbandmen to sell their land and a considerable amount of land was bought by the rich. Since the famine several seasons of cheap grain, and, in some parts of the district the introduction of higher rates of assesment, have made land a less favourite investment than before. Still pleaders and shopkeepers continue to buy land paying for garden and rice lands ten to twenty times the yearly assessment and for dry-crop land five to ten times the assessment. Twelve per cent a year is considered a

fair return for money invested in land.

In large towns, shopkeepers and a few rich Brühmau and Lingayat families who combine moneylending and cotton-dealing with agriculture, invest money in building houses. The houses that are built as an investment are always small. In large houses the expense of repairs is heavy, and even at low rents tenants are difficult The only large houses in the district which are let at a profitable rent, are the houses held by European towants in Dharwar. These houses fetch rents varying from 5s. to £8 10s. (Rs. 21-85) a In villages, from the difficulty of finding tenants, houses are almost nover built as an investment.

No particular class of people invest money in buying expensive At Ránibennur, two or three rich Brahman merchants every year buy hundreds of cattle in Maisur and sell them in Dharwar. A few Linghyats and Muhammadans at Hubli and Navalgund buy ten or twelve cattle every week in the villages round and offer them for

sale on market-days at Hubli, Dhárwár, and Navalgund.

Muhammadans, except some traders hasbandmen and labourers, do not invest much money. Linguyats and Komtis employ their profits in developing their business; and Brahmans in moneylanding. Shepherds, sheemakers, and beggars generally bury their savings.

MONEYLENDING.

No class has a monopoly of usury. A man of any caste who has gathered some capital begins to lend small sams, increasing his

business as his capital grows. Of Dhárwár usurers few, except one or two Brahmans, live solely by lending money; most earn at least part of their living as traders, pleaders, or husbandmen. The chief moneylending classes are Brahmans, Lingayats, Komtis, and a few Musalman traders. Of these, the Brahmans to a certain extent keep to moneylending alone; the Lingayats form the bulk of Dharwar traders in almost all branches of business except in hides, fat, and European liquor; the Komtis are the Telingi grain-dealers and retail shopkeepers who, since the introduction of British rule, have settled in Dhárwár from Belari, Anantpur, and Kadapa in Madras. Of Gujarát and Márwár Vánis, who have a bad name as moneylenders, there are in all not more than twenty families, who are almost all found in the large towns of Dhárwár, Hubli, Gadag, and Sávanur. Except two or three who combine moneylending with trade, Gujarát and Márwár Vánis as a class deal solely in cotton, silk, yarn, European cloth, and sometimes in saffron, pearls, and gold and silver. To borrowers of name and credit moneylenders lend sums up to £500 (Rs. 5000) and, if the borrower owns land, they sometimes advance as much as £1000 (Rs. 10,000). In villages the headmen, richer husbandmen, and shopkeepers lend £2 to £5 (Rs. 20-50) to the poorer villagers at one to two per cent a month. Even among the poorest classes, a man with a few annas to spare is always anxious to lend to some neighbour. Among moneylenders the system of book-keeping is very lax. Many small moneylenders keep no books trusting to memory or to bonds. Even of the richer moneylenders many keep nothing beyond rough memoranda. Except among Márwár Vánis, the only books kept are a rough note-book and a ledger written from the entries in the note-book. Márwár Vánis keep both a ledger and a day-book. Compared with the Márwár Vánis of the Deccan the Dhárwár moneylenders act with mildness in recovering their debts. Moneylenders as a rule have some feeling for the debtor. When the debtor is known to be in distress the lender sometimes remits part of the debt and recovers the balance either by instalments or by personal service. Consequently in Dhárwár there never have been agrarian riots like those in the Deccan. The creditors do not ordinarily make use of the civil courts for the recovery of debts. Only as a last resource do creditors resort to the courts, and even then the decrees are not always executed. When a decree is granted the judgment-creditor first tries to screw as much money as he can from the debtor. If the debtor refuses to pay, the lender insists that the debtor's property is placed under his control or that some other security is given for the payment of the debt. If the debtor furnishes the security the creditor is content to let the decree stand over, and does not obtain execution unless he finds that the debtor is bent on deceiving him by a private or a fictitious sale of his property. Creditors do not generally buy the debtor's immovable property, unless it is not likely to fetch a fair price. Encumbrances and the unwillingness of a debtor's fellowvillagers to buy his property at times enable the judgment-creditor to buy his debtor's property at a nominal price. Thus a good deal of

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land has come into the hands of moneylenders and pleaders, but as they leave the tillage to others, the change in the ownership does not come prominently to notice. As a rule, the debter makes no complaints against his creditor. When he is drugged to court the debter feels unjustly treated and charges the creditor with exterting excessive interest, appropriating the produce of the fields in payment of debts at rates cheaper than the market rates, or ignoring payment altogether. The creditor is also sometimes accused of bringing false claims and arranging with the subordinate court officials to keep the debter ignorant that a sait has been brought against him. Such charges are rare and they are almost never proved.

INTEREST.

The imperial rupce is the standard in all moneylending transactions. Interest is charged either yearly or mouthly. An additional charge is made for the extra or intercalary month, if, as is generally the case, interest runs by the month. Gujarat and Marwar Vans and all professional moneylenders keep their accounts according to the Sament year which begins in Karlik or October-November; grain-dealers and husbandmen keep their accounts according to the Shak year which begins in Chaitra or March-April. About the time when the Government assessment falls due, during the fair season when cotton and grain are largely sent to the coast and Rombay, during the marriage season which begins in November and ends in June, and at the time of the great festivals of Dusara and Divili in September-October, and of Holi in February-March, there is a specially heavy demand for money, and the rates of interest archigher than during the rest of the year. For a person of good credit, either a trader or a substantial landholder, the yearly rate of interest varies on personal security from twelve to twenty-four per cent. The rates of interest charged to artisans with pretty good credit do not differ from those charged to middling landholders. The rate on petty loans, secured by pledging ornaments or other morable property, varies from nine to twenty-four per cent. In petty agricultural advances on personal security or with a lien on crops, the rate varies from twelve to thirty-six per cent; and in large transactions, with a mortgage on movable or immovable property, from six to twenty-four per cent. Small sums lent to the needy by unprofessional moneylenders are charged interest at Ad. or Ad. (1-1 anna) a month for each rupee lent, that is a yearly rate of 18% to 371 per cent.

Borrowers.

To meet special family expenses almost all classes are occasionally forced to borrow. Of artisans, the large class of weavers of late years, owing to the fall in the profits of hand-loom weaving and to their inability or unwillingness to take to other employments, when trade has been slack, have been embarrassed and forced to borrow. They generally pay twelve to twenty-four per cent interest a year. Other artisans are believed to be fairly free from debt. Of husbandmen most Kánarese Lingáyats, Maráthás, Jains, and Musalmáns, who form the bulk of the tillers of the soil, borrow. The Bráhmaus, Chetriyas,

¹ The Samuel era begins with B.C. 56 and the Shal era with A.D. 78.

and Komtis, who, if they happen to hold land, do not themselves till it but let it to tenants, are well-to-do and seldom borrow. It may be roughly estimated that of husbandmen about ten per cent have good, twenty fair, thirty scanty, and forty little or no credit. Husbandmen of good credit on personal security are able to raise loans equal to about the value of two years' produce of the lands they till; those of fair credit raise loans equal to one year's produce, and those of scanty credit equal to half a year's produce. Husbandmen with no credit cannot raise loans without parting with property. To a husbandman with good credit the yearly rate of interest on personal security varies from twelve to twenty-four per cent; to a husbandman with fair or with scanty credit, on mortgage of land or other movable property, from eighteen to twenty-four per cent; and to a husbandman with no credit on mortgage of land never less than twenty-four per cent and sometimes more. The poorest husbandman who has neither fields nor any other property, if urgently in need of money, can raise loans of £1 to £1 10s. (Rs. 10-15) at a yearly rate of twenty-four to seventytwo per cent according to circumstances. Of the money borrowed it may be roughly said that about twenty per cent is spent in paying the Government assessment, forty in meeting marriage and other special expenses, twenty in buying bullocks and other field stock, and twenty in buying grain for food and seed. During the rains and in years of short crops rich husbandmen and sometimes moneylenders advance grain to the poorer husbandmen either for food or for seed. At the time of advancing the grain the lender receives from the borrower a written acknowledgment, specifying the conditions on which the advance is made and the time within which it is to be repaid. The conditions on which grain is advanced differ much according to The most common condition is to pay at the circumstances. harvest one-fourth and sometimes one-half in addition to the quantity During the sowing season, moneylenders sometimes advance money to husbandmen on condition that during the harvest the advance shall be paid back in grain at the cheaper harvest price with an addition of 37 to 73 pounds (1 to 2 shers) of grain for each rupee advanced. Thus for £10 (Rs. 100) advanced in June when rice generally sells at about 27 pounds (7 shers) the rupee, the borrower is to pay the money advanced in kind at the rate of 43 to 46 pounds (11 to 12 shers) the rupee in November when rice generally sells at about 40 pounds (10 shers) the rupee. In such advances, for a period of six months between June and November, the moneylender makes a profit of one-tenth to one-fifth on the money advanced that is a yearly interest of twenty to forty per cent. Though the Dharwar husbandmen are better off than the Ratnagiri husbandmen, and seldom have to leave their homes in search of employment, they are not now (1882) so well off as they were during the exceptional plenty of the American War (1863-1865). Much of the money they amassed during the American War was spent by the husbandmen in buying gold and silver ornaments and costly clothes, in giving caste dinners, and in celebrating marriage and other family events. At the close of the American War in 1865, the sudden fall in the price of cotton caused great loss to several of the richer husbandmen who had begun to deal in cotton.

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Again during the 1876-77 famine, especially in the east, the husband. men suffered severely. During the first year of the famine, except the very poorest the Dharwar landholders did not suffer. Part of the local stocks of grain were sold at high prices and sent to neighbour. ing famine-stricken districts, and enough remained to carry them fairly through the first season of distress. By the beginning of the second year of the famine the local stocks of grain were almost exhausted, and the bulk of the people had to sell the greater part of their property to keep them in food. The only people who made profits were the grain-dealers and a few rich moneylenders who bought gold and silver ornaments, idols, old coins, copper and brass cooking vessels, and even saleable clothes, at very low prices and sold them back to the people from whom they bought them at their usual prices. Up to 1882 the rates of interest have continued higher than they were before the famine. In the years that followed the famine there was a marked decrease in the amount spent on wedding and other family ceremonies. Since the famine for a well-to-do husbandman the cost of a marriage is £20 to £50 (Rs. 200-500) instead of £100 to £200 (Rs. 1000-2000); for a middle class husbandman £10 to £20 (Rs. 100-200) instead of £40 to £50 (Rs. 400-500); and for a poor husbandman £1 to £2 (Rs. 10-20) instead of £5 to £6 (Rs.50-60). On the whole the borrowing classes are satisfied with the treatment they receive at the hands of their creditors. They feel that they could not get on without them.

LAND MORTGAGE.

Land is transferred in one of three ways, by the holder's failing to pay the Government assessment, under a decree of the civil court, and by voluntary sale or mortgage. Since the 1876 famine, especially in the east where the famine was most severe, much land has fallen out of tillage. Since the famine part of this land has been taken for tillage and most of it still lies waste. Partly under civil court decrees and partly by sale and mortgage much land has of late years passed from the husbandmen to their creditors. Husbandmen whose land is transferred to their creditors under a decree of the civil court, generally till the lands of other landholders as tenants and sometimes as labourers. At present (1882) lenders prefer to make advances on ornaments and other movable property rather than on land. When land is mortgaged it is usually made over to the mortgagee for a fixed period. During this period the land is generally tilled on tenancy either by the mortgager or by some other husbandman and sometimes by hired labour. arrangements made vary as suits the convenience of the landholder and the tenant. The landlord sometimes agrees to pay the assessment, and the tenant tills the land at his own expense, paying the landlord either cash or grain equal to one-third or one-half of the Sometimes the produce is divided equally between the tenant and the landlord on condition either that the landlord pays the assessment and the tenant the cost of tillage, or that the landlord and the tenant each pays an equal share of the assessment and cost of tillage, or that the landlord pays the assessment and half the cost of tillage and the tenant the other half. Land is also tilled by tenants on wages, the landholder paying the cost of tillage and the assessment and taking the whole produce.

Labourers are better off than they were fifty years ago. area under tillago is much greater, and from the improved condition of the landholders more of the field-work than formerly is done by hired labour. Compared with the rich years of the American War the labourers have the advantage of much cheaper grain. At the same time it is probable that the higher wages and the great freehandedness of that time of plenty more than made up for the extreme dearness of grain. The labourers suffered much and long during the 1876 and 1877 famine. But as they had no fresh grain stocks to buy, and no ornaments to redeem from pawn, they have not been so long hampered by the effects of the famine as the poorer class of landholders. Moneylenders do not advance large sums to labourers except when the labourer enters into a bond to work for the lender. If a labour mortgage bond is passed sums equal to one or two years' pay that is £6 to £10 (Rs. 60-100) are advanced. Labourers vary greatly in the use they make of their surplus earnings. spend their surplus on liquor; others spend it on opium. These are exceptions; most field and other labourers are temperate and many touch neither liquor nor opium, nor, except on holidays, is much spent on rich food. Among labourers perhaps the commonest use of savings is in buying ornaments and clothes. A few labourers lend small sums of money; others hoard. A labourer's wife supplies from a fourth to a half of the family income. Boys above fourteen are self-supporting, and boys and girls from eight to fourteen earn from 1½d. to 3d. (1-2 as.) a day. Children below eight earn nothing. There is no class of hereditary servants in Dhárwár. The demand for labour is specially strong during the harvest, for rice in November, for early jvári in December, for late jvári in January and February, and for cotton-picking till the end of May. The early part of the rains, June July and part of August, after the grain is sown and before weeding begins, is the labourer's slack season. During this period labourers have mostly to depend on house-building and other jobs.

Of the poorer husbandmen and labourers, Lingáyats, Maráthás, Shepherds, Musalmans, and low-class people sometimes pledge their labour for fixed periods to pay off their debts. The man who pledges his labour is employed in collecting debts, carrying letters and messages, weeding fields, building houses, making bricks, drawing water, cleaning his master's house, or tending his master's cattle. For a loan of £10 (Rs. 100) a debtor will agree to serve for about five years. He receives his food free and such necessary clothes as one headscarf, one waistcloth or dhotar, and one pair of shoes a year, the whole worth 8s. to 10s. (Rs. 4-5). If the servant supports himself, the period of service for a loan of £10 (Rs. 100) is reduced to about three years. The debtor is ordinarily bound to devote his whole time to his master's service, but, unless there is a special agreement to that effect, the master has no claim to the service of the bondsman's wife or children. The master is not bound to pay the bondsman's marriage, death, or other He cannot, against his will, transfer the debtor's services to any other person. Though bodily punishment is not recognized as an ordinary remedy for disobedience, it is occasionally practised,

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MORTGAGE.

and no complaint is made unless the beating is unusually severe or cruel. When personal and family influences fail to induce the debtor to perform his part of the contract, masters occasionally apply to the civil courts to enforce the bond. If the debtor dies before his service is ended some member of his family is expected to work during the rest of the time. A service engagement is never hereditary. Young men under twenty called jitad alus (K.) or fee-men are generally employed by husbandmen for field labour. They have the same food as the husbandman, millet cakes, pulse, whey, onions, and hemp spinnach. At the close of the year they are given a pair of trousers, a waistcloth or dhotar, and wages at the rate of 2s. (Re. 1) a month and sometimes less. If the parents of these lads owe anything to the husbandman, the wages are Sometimes Lingáyat and Marátha deducted from the debt. husbandmen marry their daughters to poor lads of twelve to fourteen on condition that the sons-in-law work in their fields. In most cases these lads live and take their food in their father-in-law's house. When they grow to be men, if they wish it, they are generally allowed to take their wives and start houses of their own.

WAGES.

During the last forty years wages have greatly risen. In 1840. carpenters, blacksmiths, and masons were paid 6d. to 9d. (4-6 as.) a day; and a day labourer if a man was paid 3d. (2 as.), if a woman $1\frac{1}{4}d$. $(1\frac{1}{4} as.)$, and if a child $1\frac{1}{8}d$. $(\frac{3}{4} a.)$. Men servants were paid 6s. to8s. (Rs. 3-4) amonth; women servants 2s. to 4s. (Rs. 1-2); and child servants 1s. to 1s. 6d. (8-12 as.). Brahman cooks and water-carriers in addition to free meals, were paid 6s. to 8s. (Rs. 3-4) a month for men, and 2s. to 4s. (Rs.1-2) for women. In 1882, carpenters, blacksmiths, and masons were paid is. to 2s. (Re.1-1) a day, men labourers 4½d. to 6d. (3-4 as.), women labourers 3d. to 3¾d. (2-2½ as.), and child labourers 1½d. to 3d. (1-2 as.); men servants were paid 14s. to 16s. (Rs. 7-8), women servants 6s. to 10s. (Rs. 3-5), and child servents 4s. to 6s. (Rs.2-3) a month. Bráhman cooks and water-carriers were paid £1 to £1 10s. (Rs. 10-15) a month for men, and 10s. to 12s. (Rs. 5-6) for women. When employed for a month or more, the wages of artisans and labourers are 2s. or 4s. (Rs.1-2) less than the above rates. If in addition they are fed, the wages are reduced about one-third. Town labourers are paid in cash, and field labourers, especially during harvest time, in grain. Labourers as a rule are paid daily, and sometimes for a long job weekly, but seldom at intervals of more than a week. marriages and other feast ceremonies, which last four to seven days, musicians and dancing-girls are paid either a daily wage of 4s. to 6s. (Rs.2-3) for musicians and £1 to £1 10s. (Rs.10-15) for dancing-girls, or in a lump sum for the whole period, the amount varying from £1 12s. to £2 (Rs.16-20) for musicians, and from £10 to £20 (Rs. 100-200) for dancing girls. The chief and best earthworkers in the district are Vaddars, who are of two branches, stone Vaddars and earth Vaddars. The stone Vaddars do nothing but quarry and cart stones; the earth Vaddars dig, embank, and do other earthwork required in improving the fields and in making wells, ponds, houses, roads, canals, and railways. Vaddars move from place to place in search of work, living in temporary huts walled

and roofed with grass. Each gang lives in a compact cluster of huts which they build outside the village near water and grazing. Every well-to-do Vaddar has a pair of cart buffaloes and a rude low cart on which he carries his house goods when he shifts camp. The stone Vaddars have more carts which they use in carting stones. The Vaddars are strong and dark and seem one of the earliest local tribes. They have no education and are very fond of drink. As a class they are independent and difficult to handle. It is a mistake to pay them day wages without assigning them tasks. In the absence of a task they will do as little as they can. The best way of employing Vaddars on largo works, where cash payments are to be made, is to fix rates for various loads and lifts. Once rates are fixed, there is little difficulty in getting the work done. When paid in this way Vaddars soldom try to scamp work, and, if paid once a fortnight, they are perfectly satisfied. They work in gangs, each gang having its foreman who negotiates the rates, measures the work, and shares the wages. Men women and children above twelve all work. The men dig and fill the baskets, and the women and children carry. On piece work Vaddars work from four to ten in the morning, rest for about four hours, and again work from two to five in the evening. The Vaddars' tools are kudalis or axes, pardás or spades, and large wicker baskets. It is wonderful how easily a grown Vaddar woman can carry a large earth or murum basket up a high embankment, work which would be too much for an ordinary man. When employed on piece work, the Vaddars' daily earnings average 41d. to 71d. (3-5 as.) a head. The work done by each gang is measured separately, and the headman generally distributes the money equally among all the members of the gang including the women and the working children. Village Vaddars generally work by contract for grain. When a well is to be dug or a tal or bank is to be raised, the landholder calls in the nearest foreman Vaddar, shows the length and breadth of the work, and enters into a verbal contract with him to pay a fixed quantity of grain for the work. For work of this kind village Vaddars are generally employed. As a rule, every group of five or six villages has enough well-digging and banking to support a small Vaddar gang. Besides Vaddars a few Lamanis occasionally do earthwork. Stone Vaddars differ little from earth Vaddars, except that one works in earth and the other in stone. The stone Vaddars quarry the stone and carry it in their carts to the work. These carts, of which each stone Vaddar has two or three, carry four to six cubic feet of stone and are small and rough, the wheels being made of solid pieces of wood joined together. Stone Vaddars are specially clover in using the sledge hammer to break and square stones. They hardly over blast with gunpowder. They heat the stone, and pour cold water over it, when the stone splits with a remarkably even fracture. In Dharwar skilled labour is poor and rare. Except in the towns of Dhárwár Hubli and Gadag fow carpenters or black-

smiths can do any work more difficult or delicate than making and mending rough field tools, and the number of skilled masons is still smaller. Apparently from the cheapness of food and the want of competition in Dhárwár craftsmen seem to have neither energy nor Chapter V. Capital. WAGES. Capital.

wish to better their condition. A craftsman can make a living by working four or five days a week, and beyond his living he seems not to care. On the Marmagaon-Belári railway now (1884) under construction, the earthwork within Dhárwár limits is being chiefly done by Vaddars, and almost all the skilled labour comes from the Deccan. Most masons and blacksmiths come from Poona, Sátárs, and Kolhápur, and most carpenters from Poona, Sátartvádi, and Goa. In 1883 a few Cutch masons came seeking work. On the railway masons and carpenters earn 1s. 6d. to 2s. (Re. \frac{2}{3}-1) a day, and blacksmiths with their bellows' boys 2s. to 3s (Re. 1-1\frac{1}{2}). Most overseers and foremen, who are difficult to get, belong to Poona and Sátára. Overseers earn \partial 5 to \partial 8 (Rs. 50-80) a month, foremen \partial 3 to \partial 5 (Rs. 30-50), and timekeepers \partial 2 to \partial 3 (Rs. 20-30).

Weights and Measures.

Dharwar weights and measures are neither periodically inspected nor stamped by the police. There is much variety in different parts of the district. Though the tables and the names are the same throughout, they differ much in weight, shape, and size in different sub-divisions, even in different towns in the same sub-division. In 1845 a standard measure equal to 136 tolás' weight of pure water was introduced, and in 1849 the standard was changed to the Bengal sher equal to eighty tolás' weight of water. As the Bengal sher was so much smaller than the 136 tola measure introduced in 1845, a hoop was added to the 136 tola measure to make it equal to 160 tolás' weight of water or double the Bengal standard. This double sher became known as the Dharwar sher. In 1852 when the Bengal sher equal to eighty tolás' weight of water was introduced into various districts, Government supplied the Collector of Dhárwar with a sher measure holding eighty tolás' weight of distilled water, with contents of 57.0392 cubic inches and with a height of 4.1721 inches, with a half sher measure holding forty tolás' weight, with contents of 28.5196 cubic inches, and with a height of 3.31114 inches, and with a quarter sher measure holding twenty tolás' weight, with contents of 14.2598 cubic inches and with a height of 2.6283 inches. The diameter of each measure was equal to its height. Before these measures were supplied by Government the standard had been introduced into the district in 1849, and two sets of measures had been made, one set holding 160 tolás' of water called the Dhárwár sher, and the other set holding eighty tolás' of water called the Bengal sher. These measures cannot have been made with any accuracy. Distilled water could not be got, the temperature at which it was to be weighed does not appear to have been prescribed, and the shape of the measures which is more important was not specified. The standard measure was determined by the weight of water it held, but in Dharwar in measuring grain a heaped measure is and always has been used. Two measures of different shape might hold equal quantities of water but different quantities of grain by heaped measure. In 1861 and 1862 it was brought to notice that the measures in use varied in capacity and that measures holding equal quantities of water did not hold equal quantities of heaped grain. It was also found to be impossible to test measures by weighing the water they held, because many of them were not water-tight. The chief reason why the measures

were not water-tight, was that in 1849 measures to hold 160 tolás had been made by adding a hoop to the top of the old 136 tolás' measures. An order was then issued that grain might be used in testing the measures but the weight of grain which the standard measure should contain has never been laid down. In 1865 to settle the grain compensation to be paid to sepoys when grain was dear, Mr. Reid directed that a measure which held eighty tolás' weight of shejji grain by exact and not by heaped measure should be adopted. This order was given for a special purpose, but it strengthened the supposition that the standard of measure was determined by the weight of grain and not by the weight of water. Between 1865 and 1893 little seems to have been done regarding measures, except that a set of brass measures was made in 1874 at the Dharwar factory for the Collector's office. Up to 1883 the standard determined by the weight of water and introduced in 1849 has never been altered, but heaped measure instead of exact measure has always been used for grain. In 1882, in testing the standard measures at the various sub-division offices Mr. Middleton, the Collector, found that the measures were very roughly made and were not accurate. Some measures were not water-tight and many had not the same diameter throughout. The lifts were irregular in form, and different measurements of the same measure gave different results. As the shape was irregular, a measure which according to the dimensions given ought to hold more, sometimes in reality held less than another. Some sub-divisions had more than one set of standard measures. Some of the measures which were stamped E. I. C. 1847, must have been made before 1849 when the present standard was introduced, though it is still the custom to stamp the letters E. I. C. as the Government mark on measures brought to the Government offices to be tested. Of the evils which arise from having standard measures of different capacity, one is that at a criminal prosecution for using false measures the Hangal trader, who has got a Dhárwár sher measure tested at the Hángal sub-division office holding 137 tolás' weight of grain by heaped measure, runs the risk of being punished for using too small a measure, if he uses it in selling grain in the adjoining sub-division of Karajgi where the standard holds 1511 tolás weight, while he may be punished for using too large a measure if he uses it in buying grain in the adjoining sub-division of Kod where the standard holds 124 tolás. Another evil is that the half sher is not equal to half of the full sher, nor is the quarter sher equal to a quarter of the full sher. As the diameter of the Dharwar sher measure and of the Dharwar half sher that is the Bengal sher measure is the same, the additional quantity obtained by the use of heaped measure is the same both for the sher and the half sher instead of being double for the sher. The half or Bengal and the quarter shers are only occasionally used and are inaccurate. Two halves are not equal to one whole, neither are four quarters. Though the standard measures kept in the various sub-division offices differ very greatly, the difference between the measures in actual use throughout the district is probably not so great, because measures are chiefly made at Hubli where they are tested before being distributed for sale.

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Weights are of two sorts, one for precious metals, drugs, and medicines; the other for grain and the cheaper metals copper, brass, iron, lead, and zinc. The weights for precions metals are round or square and are made of bellmetal. The table is eight quinas one masa, twelve masas one tola, twenty-four tolas one shir, twelve shers one dhada, and four dhada's one man. Sometimes another table is used, six gunjás one ánna, sixteen ánnás one tola, and twenty-four tolas one sher. Tho gunja or gulganji is the red black-tipped Abrus seed. The tola is equal to the Imperial rupee or 180 grains Troy; the man is equal to 2917, pounds avoirdupois. The weights in use for the cheaper metals and for grams are made of iron and are in the form of round thick plates, Their table of reckoning is nine taks one navták, two navtáks one quarter sher, two quarter shers one half sher, two half shers one sher. It shers one savúsher, two savúshers one adichshers, two adichshers one panchsher, two panchshers one dhada, two dhadas one half man, two half mans one man, four mans one andgi, and two andgis one goni or heru. Of these weights the tak is nominal, weighing about a quarter of a rupee, the naviák two rupees and a half, and the sher twenty rupees. Up to the sher, which as a rule is equal to twenty rupees, the scale of this table is the same for all articles. But the savisher, which ought to equal twenty-five rupees, and the weights that follow it differ much for various articles. The sarasher is fixed equal to thirty-five rupees for copper, brass, and bellmetal, to 321 rupces for cotton, tobacco, clarified butter, and parched channa or gram; to 311 rupees for all articles of food sold by weight; to thirty rupees for iron and stoel; and to twenty-five rupees for cotton-seed and oil-cake. Thus, keeping a fixed standard of twenty rupees weight for each sher, the man which is ordinarily equal to forty shers, actually contains for copper, brass, and bellmetal fifty-six shers or 2813 pounds; for cotton, tobacco, clarified butter, and parched grain fifty-two shers or 26,70 pounds; for all articles of food sold by weight, fifty shers or 25% pounds; for iron and steel forty-eight shers or 21% pounds; and for cotton-seed and oilcake forty shees or 201 pounds. In weighing lamp-oil, which is generally sold by brass copper or earthen measures corresponding to the scale of weight, the sacrisher, which is called the quarter mogha, weighs twenty-live rupees and the man contains forty shers of twenty rupees or 201 pounds. The table of reckoning is two quarter moghus one half moghu, two half moghus one moghu, two moghus one quarter man, two quarter mans one half man, two half mans one man, and eight mans one naga. Among natives cotton is bought and sold by mans of fifty-two shers of twenty rupees each. Europeans cleaned cotton is sold in pounds. The table is seven pounds one dhada or quarter man, fourteen pounds one half man, twenty-eight pounds one man, eight mans one naga, and twenty mans one Lhandi. A pound being equal to nearly thirty-nine rupees, this man of twenty-eight pounds contains 513 shere of twenty rupees each. In selling raw silk the wher is equal to twentyfive rupees for silk traders and to twenty-four rupees for other classes. In selling indigo the table in use is twenty lolis or rupee: one ther, 104 shers one dhada, and four dhadas one non or 274

pounds. Milk and curds are sold by a measure containing eighty rupees weight. This measure is called the pakka or full sher as opposed to the kachcha or small sher which weighs twenty rupees.

The table used in measuring grain is two chhataks one quarter sher, two quarter shers one shers one sher, two half shers one sher, two shers one padi, two padis one chitti, eight chittis one imna, sixteen chittis or two imnas one andgi, two andgis one goni or heru, and twenty gonis or herus one khandi. As each grain has its own weight the general weight of the contents of these capacity measures cannot be stated.

Cotton goods, silk goods, European printed piecegoods, and longcloth are measured by the gaj or vár, both of which are the yard of three feet. Turbans, waistcloths or dhotars, women's robes or sádis, and country longcloths are measured by molas or cubits. vár, or yard is made of brass, iron, or wood. The gaj is divided into twenty-four tasus each equal to one and a half inches, and the vár into sixteen giras each equal to two and a quarter inches. No separate cubit measure is actually made and marked off with its sub-multiples. The table of cubit measure is twelve angulis one genu or span, two genus one mola or cubit, and four molás one már or fathom. The anguli or finger's breadth is equal to three-fourths of an inch and the mola or cubit is equal to fifteen inches. The mar is the distance from the tip of the middle finger of one hand to the tip of the middle finger of the other hand when both hands are stretched horizontally in a straight line. The table used in long measure is three javs one anguli, four angulis one mushti, three mushtis one genu, two genus one mola, four molás one dand or már, 2000 dands or mars one kos, and four kosas one yojan. The unit a jav or barley corn is equal to one-fourth of an inch. This measure varies much in different localities. A Dharwar kos generally equals three English miles and it occasionally is as much as four.

Of former land measures tradition says that in the times of the Bahmani Musalmán kings of Kalburga (1343-1490), Vithalpant, one of their chief officers, surveyed the land and divided it into márs and assessed them in huns. These márs are called Vithalpanti márs, because, it is said, he caused the measurement to be made by certain multiples of his own már or arm's stretch. Each Vithalpanti már contained four kurgis, a kurgi being the area of land which the Kánarcse kurgi or seed-drill can sow in a day. As the kurgi has been found to contain about eight acres, a Vithalpanti már is equal to about thirty-two acres. Some time during the sway of the Vijayanagar or Anegundi kings (1336-1570), apparently after the time of Vithalpant, a new survey was made and the lands divided into márs and assessed in Anegundi huns. These márs were called Ráya Rekhi márs or the Anegundi Rája's márs. The Vijayanagar már like the Bahmani már contained four kurgis. But as

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¹ In the Karnátak the Anegundi or Vijayanagar kings alone were called Ráyas which is corrupted from the Sanskrit rájan a king, Rekhi means a line drawn, and honce anything settled. Ráya Rekhi márs means the már measure settled by the Ráyás that is by the Anegundi kings.

Chapter V. Capital. Measures. the Vijayanagar kurgi contains only four acres of land instead of eight, a Rái Rekhi már is equal to sixteen acres instead of thirty-The Vijayanagar már was also called the hull or small már. Chigars, visas, pattis, and kanis, which were the parts of a már. have fallen into disuse. The bigha was introduced into the Bombay Karnátak by Peshwa Báláji Bájiráo when he took the country in 1753. The following is the bigha table. Four square angulis one mushti. three mushtis one vet, two vets one hat, 5; hats one kathi, twenty kathis one pánd, twenty pánds one bigha, and 120 bighás one cháur. The length and breadth of eight corns of wheat make one square anguli or a square of the length and breadth of a finger. About one and half and in some places one and three-quarters biglias make an acre of landin Dharwar. Owing to the succession of opposing governments in the seventeenth, eighteenth, and nineteenth centuries the varieties in the size of the bigha gave hereditary district and village officers and other free landholders the opportunity of practising frauds on Government. The areas of the older land measures, if ever fixed, were also greatly altered in different villages and even in the same village; consequently the number of acres contained in a mar or kurgi of land or in their sub-multiples the chigur, visa, patti, and kani, or the number of bighas in an acre, are not the same in all places. Both the mar and bigha measurements continued in use for some time after the introduction of British rule. About 1824 the acre was introduced by the British Government. Since 1839-40, the present regular survey of lands and their division into acres, gunthás or fortieths of an acre, and annas or sixteenths of a guntha, and the assessment in Imperial rupees have come into general use. Even now the common Kanarese people do not exactly know how much land an acre or a bight contains. When they are told what portion of a mar or of a kurgi an acre forms, they readily understand. Konkanasths and others from the Deccan who have settled in Dharwar, understand the bigha better than the mar, kurgi, or acre. The following table of acre measurements is current in Dharwar as well as in other parts of Bombay: 81 feet broad and 81 long that is 681 square feet make one ánna, sixteen ánnás one guntha, and forty gunthás one acre.

Building sites and other lands within towns or villages are measured by square yards. Leather coir and cotton or hemp ropes are measured by mars or fathoms and molas or cubits and not by gajs or várs that is yards. All Government building work is calculated by yards, feet, and inches, while private work is calculated by cubits each eighteen inches long. Of building materials stone and timber are sold by cubic measures. Fair solid stones for the edges of buildings are at present (1884) sold at 14s. to 18s. (Rs. 7-9) the hundred cubic feet. Large and rough cut ironstone or laterite is sold at 10s. (Rs. 5) the hundred cubic feet. Heaps of small stones are sold at £1 12s. (Rs. 16) the heap ten cubits long ten broad and one high forming nearly 460 cubic feet. Since much open space is unavoidably left between small stones when they are heaped together, in measuring heaps of small stones the length of a cubit is taken at twenty instead of at eighteen inches Timber is sold at £2 to £3 (Rs. 20-30) for a beam twelve and half feet long, one foot broad, and one foot thick. Small bamboos called sibus are sold at 5s. to 6s

(Rs. $2\frac{1}{2}$ -3) the hundred, and large bamboos called galas at 16s. to 18s. (Rs. 8-9) the hundred. Bricks and tiles are sold by tale. Burnt bricks twelve inches long, six broad, and three thick cost 16s. to £1 (Rs. 8-10) the thousand. Unburnt bricks of the same size cost between 4s. and 6s. (Rs. 2) the thousand. No excess number of bricks is given to cover wear and tear. There are three kinds of tiles. The best black tiles turned on the potter's wheel cost 14s. or 16s. (Rs. 7-8) the thousand; black tiles made by hand cost 5s. or 6s. (Rs. $2\frac{1}{2}$ -3) the thousand; and inferior red tiles cost 3s. or 4s. (Rs. $1\frac{1}{2}$ -2) the thousand. One tile in every hundred is allowed for wear and tear. Earth is sold at $1\frac{1}{2}d$. (1 a.) the basketful.

Mats are sold singly. Eor every hundred square feet of single woven matting the cost is 1s. 6d. (12 as.) and for double woven matting 4s. (Rs. 2). Of straw and fodder, millet stalks called kanki in Kánarese, are sold at so many bundles the rupee according to the size of the bundle. In buying millet stalks the length of the rope by which the bundle is to be measured, whether four and a half, five, or six cubits, is first fixed. Then as many stalks as the rope can enclose when drawn tight are considered one bundle. When the size of the bundle is settled, the number of bundles to the rupee is fixed. The usual price of millet stalks in a good season is four or five bundles the rupee. In bad seasons as much as 6s. or 8s. (Rs. 3-4) are paid for one bundle. Rice and rági straw is sold by the big or hali wagonload. A hali cart is a big heavy wagon, borne on solid wooden wheels with heavy iron tires. It is used by husbandmen for field-work only and not in going from one village to another. The wagon is drawn by six or eight bullocks, and carries about 3200 pounds (80 mans) or twice as much as the two-bullock chhakdi or spoke-wheel cart which has been introduced since the beginning of British rule.

When crops are cut and thrashed and the grain is separated from the chaff in the field it is not usual for husbandmen to measure the grain in the field with any metal measure of capacity. They have baskets called *zhallis* large enough to hold one *heru* of 128 *shers* or 500 pounds of grain. With these baskets they measure the grain and roughly estimate the outturn. They then carry the grain to their houses and measure it with some metal measure of capacity and either sell it or store it in pits. Chaff is also measured by the *zhalli* basket.

Vegetables are not generally sold by weight. When they are sold wholesale the rate is so many baskets the rupee. Large vegetables are sold retail by the number, and other leaf vegetables, when they can be tied into small bundles of about an inch in diameter, are sold at so many bundles the anna. When the fruit vegetables are small, or the leaf vegetables cannot be tied in bundles, they are sold in small quantities at so much the anna. In very rare instances small vegetables are sold by weight. Fruits, such as mangoes guavas and coccanuts, are sold by the number. Grass is sold by the hundred bundles, five being given in excess to cover waste; cowdung-cakes for fuel are also sold by the number at about 700 the rupee. Hides and horns are sold by the number. Firewood is sold by the cartload by those who bring it from the

Chapter V. Capital. Measures. Chapter V-Capital. MEASURES. forests. Firewood in the Government store is sold at 7s. (Rs. 3½) the khandi. As Dhárwár has no regular shops for selling pearls and precious stones the weights are little understood. All purchases are made in Bombay or Poona and the jewels are sold in retail by Márwár Váni and other moneychangers.

The table for measuring time is sixty vipals or eyewinks one pal, sixty pals one ghadi, 2½ ghadis one hora or hour, 3¾ ghadis one muhurta, 72 ghadis one prahar, four prahars one divas or day, eight prahars one ahorátra or a day and night, seven days one áthavda or week, fifteen days one paksh or fortnight, two pakshas one lunar month, and twelve lunar months one lunar year. To adjust the lunar and solar years an intercalary month is added about once in every two and a half years and a month is dropped about once every 160 During marriage, thread, and other religious ceremonies the lucky moment is not ascertained by the ordinary watch or clock. From sunrise on the day of the ceremony the time is measured by A copper cup with a small hole at the bottom is a water-clock. floated on the surface of a basin of water. The water rising through the hole overturns the cup exactly in a ghadi. The cup is taken out and again placed on the surface of the water and goes down in another ghadi. In this manner the required number of ghadis is ascertained. Another mode of measuring time when the sun is shining is for a man to measure by his own feet the length of his shadow. To tell the time of day from a shadow one plan is, in an open sunlit spot, to measure in feet the length of one's shadow, to add six to the number of feet, and divide 121 by the sum. The quotient gives the time in *qhadis* of twenty-four minutes after sunrise if the sun has not crossed the meridian, and before sunset if the sun has crossed the meridian. Another plan is to hold upright a thin rod eighteen ánglis or finger-breadth's long, bend it so that its shadow will touch the other end of the rod on the ground and measure in anglis the perpendicular height of the rod. This like the other plan shows the number of ghadis either after sunrise or before sunset.

Prices.

Yearly price details some of which are little more than estimates, are available for the eighty-four years ending 1883. During these eighty-four years the rupee price of Indian millet, which is the staple grain of the district, varied from nineteen pounds in 1864 and 1877 to 165 in 1814 and averaged ninety-three pounds. In three of these eighty-four years, the price was below 160 pounds the rupee, 165 in 1814, 162 in 1832, and 161 in 1811; in four it was between 160 and 150 pounds, 157 in 1850 and 1852, and 154 in 1843 and 1845; in four it was between 150 and 140 pounds, 150 in 1841 and 1849, 146 in 1813 and 142 in 1823; in nine it was between 140 and 180 pounds, 139 in 1835 1844 and 1848, 135 in 1812 1847 and 1851, 132 in 1831, and 131 in 1815 and 1854; in seven it was between 130 and 120 pounds, 129 in 1840, 127 in 1824 1828 1838 and 1842, 124 in 1829, and 122 in 1830; in seven it was between 120 and 110 pounds, 120 in 1827 and 1846, 116 in 1808 and 1857, and 112 in 1800 1836 and 1837; in five it was between 110 and 100 pounds, 109 in 1810 and 1853, 108 in 1805, and 105 in 1809 and 1825; in

six it was between 100 and ninety pounds, ninety-seven in 1839, ninety-four in 1801 1802 and 1859, and ninety-two in 1822 and 1858; in four it was between ninety and eighty pounds, ninety in 1860 and 1869, and eighty-six in 1806 and 1855; in six it was between eighty and seventy pounds, seventy-nine in 1826 1861 and 1868, seventy-five in 1807 and 1834, and seventy-one in 1856; in eight it was between seventy and sixty pounds, sixty-eight in 1817, sixty-seven in 1816 and 1833, sixty-five in 1821, sixty-four in 1881. sixty-three in 1818 and 1819, and sixty-two in 1820; in six it was between sixty and fifty pounds sixty in 1871 and 1882, fifty-six in 1862, and fifty-two in 1875 1876 and 1883; in eight it was between fifty and forty pounds, fifty in 1803, forty-seven in 1874, forty-six in 1880, forty-four in 1879, and forty-one in 1863 1867 1870 and 1873; in two it was between forty and thirty pounds, thirty-nine in 1872, and thirty-five in 1878; and in five it was between thirty and fifteen pounds, twenty-six in 1865, twenty-one in 1804, twenty in 1866, and nineteen in 1864 and 1877. The eighty-four years may be divided into ten periods. Except in 1803 when the price was fifty pounds and in 1804 which was a famine year when the price was twenty-one pounds, in the first period of eight years ending 1807 the price varied from 112 in 1800 to seventy-five in 1807, and averaged eighty pounds. In the second period of eight years ending 1815, the price varied from 165 in 1814 to 105 in 1809, and averaged 133 pounds. In the third period of six years ending 1821 the price varied from sixty-eight in 1817 to sixty-two in 1820, and averaged sixty-four pounds. Except in 1822 when the price was ninety-two pounds and in 1826 when the price was seventynine pounds, in the fourth period of eleven years ending 1832, the price varied from 162 in 1832 to 105 in 1825, and averaged 121 pounds. Except in 1833 and 1834 when the prices were sixtyseven and seventy-five pounds respectively, in the fifth period of seven years ending 1839 the price varied from ninety-seven in 1839 to 139 in 1835, and averaged 104 pounds. In the sixth period of fifteen years ending 1854, the price varied from 157 in 1850 to 109 in 1853, and averaged 132 pounds. Except in 1857, when the price was 116 pounds, in the seventh period of seven years ending 1861, the price varied from ninety-four in 1859 to seventyone in 1856, and averaged ninety pounds. Except in the years of short harvests and abundant money 1864, 1865 and 1866 when the prices were nineteen, twenty-six and twenty pounds, in the eighth period of six years ending 1867, the price varied from fifty-six in 1862 to forty-one in 1863 and 1867, and averaged thirty-four pounds. Except in 1868 and 1869 when the prices were seventy-nine and ninety pounds respectively, in the ninth period of nine years ending 1876, the price varied from sixty in 1871 to thirty-nine in 1872, and averaged fifty-five pounds. Except in the famine year of 1877 when the price was nineteen pounds, in the tenth period of seven years ending 1883, the price varied from thirty-five in 1878 to sixty-four in 1881, and averaged forty-six pounds. The details are:

Chapter V. Capital. Prices.

DISTRICTS.

Chapter V. Capital. Pricks.

Dharwar Produce Prices (Pounds the Rupee), 1800-1883.

	Γ	First Period.									Spoond Period.								
Раовиса	1800.	1801.	1802.	1803.	1804.	1808.	1806.	1807.	1808.	1809.	1810.	1811.	1812	1813,	1814.	1815.			
	112 101 54	94 80 45	94 75 45	50 70 35		108 101 43	80 89 30	75 72 39	u i	105 101 61	109 94 60	161 84 58	135 77 62	146 101 63		131 84 64			

		TH	IRD I	erio	D.		þ -			1	Foot	ти 1	PERIO	D.			_					
Produce.	1816.	1817.	1818.	1810.	1820.	1821.	1822	1823.	1824	1895.	1826.	1827.	1828.	1829.	1830.	1831.	1834					
Indian millet Spiked millet Rice	67 56 37	68 56 43	63 45 45	03 52 45	62 61 52	65 61 14	92 87 56		127 106 60	105 98 49		120 105 60	127 105 60		122 69	132	162 82					

	Fifth Period.								Sixtu Period.								
Produce.	1893.	1834.	1835.	1830.	1837.	18%8,	1839.	1840.	1841.	1842	1843.	1844.	1845.	1840.			
Indian millet Spiked millet Rice	67 52		130 126 67	112 105 60		127 133 52		129 122 60			150			120 94 62			

	١	Sixtu Petriod-continued.									Spreyth Person.							
PRODUCE.		1847.	1848.	1840.	1850.	1851.	1852,	1863.	1854.	1856.	1850	1867.	1858.	1869.	1860.	1881.		
Indian millet Spiked millet		135 105	139 112	150	-		126	112	131 87	86 80	71 68	116 94	92 84	94 80	90 70	79 66		
Rice		67	64	86	75	CO	67	73	GO	6G	45	49	45	45	41	30		

1		Eig	BTE	Peri	OD.		l			Nint	n Pe	R10D.			
PRODUCE.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1811.	1872.	1873.	1874.	1875.	1876.
Indian millet . Spiked millet Rice	56 42 34	41 42 26	19 16 14	26 21 14	20 19 15	41 38 22	79 63 26	90 56 24	41 31 17	60 49 26	39 31 19	41 88 20	47 42 26	52 49 41	52 49 35

	Tenth Period.											
Produce.	1877.	1878.	1879.	1860.	1881.	1682	1883.					
Indian millet Spiked millet Ruce	19 19 15	35 30 19	44 31 24	46 37 27	64 63 2 6	60 56 23	52 49 30					

CHAPTER VI.

TRADE.

Berone¹ 1844, the Bombay Karnátak, especially the Dhárwár district, was very badly off for roads. Carts were almost unknown and long distance traffic was carried on entirely by pack-bullocks. Even within the district, except by a few main tracks or during the fair season after the crops had been cleared, it was extremely difficult to take a cart anywhere. There was little or no traffic westwards with Kanara and the coast. In a distance of about 350 miles, between the Bhor pass near Poona and the extreme southern frontier of the Bombay Presidency, the only cart-road across the Sahyadris was by the old Ram pass between Belgaum and Vengurla. The old Ram pass was three miles long, and for long stretches had an incline of one in five or six. Carts went up and down by lightening loads and clubbing the bullocks of two or three carts together. The Ram pass was too far north for Dharwar traffic. What little traffic there was went on bullocks by rough tracks down the Sahyadris to Kumta, Ankola, and other North Kanara ports. About this time (1844), the inland parts of the Bombay Presidency were cut off from the sea by native states, Goa, and Madras. Satara and Kolhápur cut off the North Karnátak from the Ratnágiri coast; Sávantvádi and Goa cut off Belgaum from the sea ; and North Kánara then in Madras cut off Dhárwár. About 1845 the first pass within Kánara limits was improved, and this pass was far south leading to Honávar. About 1848 measures were taken to open a route to Kumta. Between 1850 and 1860 a great advance was made in opening communications with the western coast through Kanara. In 1850 the Dharwar-Belgaum road in the north was unfit for traffic during the rainy season; it was unbridged and the Malprabha at times rose to a great height.2 Within Dharwar limits the last bridge on the great military trunk road north to Belgaum Satara and Poons and south to Harihar and Madras, the Vardha bridge, about fifty-miles south of Dhárwár, was not completed till 1866. As late as 1856 the only made and bridged roads were about sixty miles of the Poona-Harihar road between Belgaum and Hubli and the road from Dharwar by Mundgod Sirsi and the Devimani pass about 110 miles to Kumta. Since 1864 the local funds system has placed increased means for constructing and improving roads in the hands of the Commissioner and Collector. Murumed roads, that is roads laid with decayed trap, and carts have Chapter VI. Trade. Roads.

Bom. Gov. Sel. CLV. 21; CLX, 15; CLXI. 5; and LCXII. 8.
 Mackay's Western India, 393.

Chapter VI. Trade. Roads. in most places replaced foot tracks and pack bullocks So great has the change been that tándás or camps of Brinjáris with their numerous pack-bullocks are now hardly ever seen. At present (1884) three ports can be reached from Dhárwár by good passes and roads, Kumta by the Árbail and Devimani passes, Kárwár by the Árbail pass, and Goa by the Tinái pass, though by this last route the traffic is small.

At1 present (1883) Dhárwár has ton chief lines of traffic, the Poons. Harihar, the Karwar-Belari, the Dharwar-Kumta, the Mundgod-Bankapur, the Pála-Bádámi, the Hávanur-Samasgi, the Haribar-Samasgi, the Hubli-Sholapur, the Tadas-Gondi, and the Masur-Mundargi roads. The Poona-Harihar road, of which about 107 miles lie within Dharwar limits, runs north-east and south-west through the sub-divisions of Dhárwar Hubli Bankapur Karajgi and Ránebennur. On this road the milestones are numbered from Poona. The road enters the district in the north-west at 246 miles from Poons, and passes Tegur at 247 miles with a travellers' bungalow, Dharwar at 261 miles with a travellers' bungalow, Hubli at 274 miles with a travellers' and a district bungalow, Tirmalkop at 287 miles with a travellers' bungalow, Shiggaon at 301 miles with a district bungalow, Bankapur at 305 miles; crosses the Vardha by a bridge at 312 miles near Konomelehalli; passes Háyeri at 320 miles. Motebennur at 327 miles with a travellers' bungalow, Ránebennur at 340 miles with a district bungalow, and Yennihossahalli at 348 miles. At 353 miles, near Harihar on the right or southern side of the river in Maisur, the road crosses the Tungbhadra by a bridge and enters Maisur. The road is bridged and partly metalled, and is fit for carts throughout the year. The Karwar-Belári road, of which ninety miles lie within Dhárwár limits, runs through the sub-divisions of Kalghatgi Hubli Navalgund and Gadag. Of the ninety miles within Dharwar limits, for twentyseven the road runs north-east from the west border of Kalghatgi to Hubli, for thirty-four it runs nearly east from Hubli to Gadag, and for twenty-nine it runs south-east from Gadag to Hesrar on the Tungbhadra. On this road the milestones are numbered from Kárwár. The road enters the district at seventy-five miles from Kárwár on the west border of the Kalghatgi sub-division, and passes Kalghatgi at eighty-five miles, Dastikop at eighty-seven miles with a travellers' bungalow, Hubli at 102 miles with a travellers' and a district bungalow, Annigeri at 123 miles with a travellers' bungalow, Gadag at 136 miles with a district bungalow, Dambal at 149 miles with a district bungalow, Mundargi at 159 miles, and Hesrur at 165 miles with a travellers' bungalow. At Hesrur the road crosses the Tungbhadra by a ford, and, leaving the district, goes twentytwo miles further to Belari. Within Dharwar limits the road is bridged throughout and metalled for thirty-five miles and murumed, that is laid with decayed trap, for fifty-five miles. It is passable to carts throughout the year. The Dhárwár-Kumta road, which leads to the large port of Kumta in Kánara, leaves the Poona-Harihar

road at Tirmalkop about twenty-five miles south of Dharwar: passes Tadas at twenty-eight miles with a district bungalow; enters the Kanara district at about thirty-five miles on the north-western border of the Bankapur sub-division; and runs for about eighty miles to Kumta by Mundgod Pála Ekambi Sirsi and the Devimani pass. The road carries heavy traffic in cotton and is passable to carts throughout the year. To open other parts of the district with the port of Kumta, four lines were made to join the Dharwar-Kumta trunk road. From Mundgod on the Dhárwár-Kumta road in Kánara, about forty-three miles south of Dhárwár, the Mundgod-Bankapur road runs sixteen miles east to Bankapur. Of the sixteen miles twelve are within Dharwar limits. From Pala on the Dharwár-Kumta road in Kánara, about twelve miles south of Mundgod, the Pála-Bádámi road runs 102 miles north-east to the border of the Bádámi sub-division in Bijápur. The road enters the district about half a mile cast of Pala and runs twenty-one miles to Bankapur by Malligar. The twenty-one miles between Pála and Bankápur are bridged throughout and are fit for carts throughout the year. From Bankapur the road runs forty-eight miles to Gadag by Savanur Lakshmeshvar and Mulgand. Though the line is laid out, the forty-eight miles between Bankapur and Gadag are neither bridged nor murumed, and are fit for carts during the fair season only. From Gadag the road runs twenty-five miles to Ron. As they run in deep black soil, the twenty-five miles between Gadag and Ron, though bridged and partly murumed, are impassable during the rains. From Ron the road runs eight miles to the border of the Badami sub-division. As they run parallel to the Hutgi-Gadag railway line, the eight miles from Ron to the Badami border are not now kept in repair. From Ekambi on the Dharwar-Kumta road in Kanara, about ten miles south of Pála, a road runs seven miles cast to Samasgi on the south-western border of the Mangal sub-division. From Samasgi the road divides in two, one branch leading fiftythree miles east to Havanur and the other about sixty miles east and south-east to Haribar. The Havanur-Samasgi road runs east through the Hangal and Karajgi sub-divisions, and passes the Alur-Hangal junction at twelve miles east of Samasgi and Alur at fifteen miles; crosses the Vardha by a ford at twenty-five miles near Sangur; passes Haveri at thirty-two miles on the Poona-Harihar road, Guttal at forty-nine miles, and Havanur at fifty-three miles. At Havanur the road crosses the Tungbhadra by a ford and enters the Belári district. The road is partly bridged, murumed, and embanked with drains and a few culverts. The Harihar-Samasgi road runs east and southeast through the sub-divisions of Hangul, Kod, and Ranebennur, and passes Makravalli about twelve miles east of Samasgi; crosses the Vardha at fifteen miles near Houthan; passes Tallivalli at seventeen miles, Havasbhavi at twenty-seven miles, Kod at thirtyfive miles, Halgeti at forty-five miles, and Yennihossahalli at fifty-four miles on the Poona-Haribar road. From Yennihossahalli the road goes along the Poona-Harihar road south for five miles to Harihar. From the Dharwar district to Bijapur and Sholapur the chief line is the Hubli-Sholapur road. The ordinary route from Hubli to Konnur on the horder of the Bijapur district passes Tirlapuratsixteen

Chapter VI. Trade. ROADS. Chapter VI.
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Roads.

miles north of Hubli with a travellers' bungalow, Nadgund at thirtytwo miles with a district bungalow, and Konnur at forty-four miles. For Konnur another line has been lately chosen by Hebsur and Navalgund to Nandgud and Konnur; but this line is not completed and is inferior to the ordinary route. Both these routes to Konnur, being in black soil throughout, are impassable during the rains. At Konnur the road crosses the Malprabha by a ford, and, entering the Bijápur district, goes 116 miles from Hubli to Bijápur and 177 miles From Tadas on the Dharwar-Kumta road, about twenty-eight miles south of Dharwar, the Tadas-Gondi road branches off thirty-eight miles south to Gondi on the Vardha in the Hangal sub-division. The road runs south through the Bankanar and Hangal sub-divisions, and passes Dhundshi at seven miles south of Tadas, Konankeri at thirteen miles on the Mundgod-Bankapur road, Mahárájpeth at twenty-three miles; goes along the Pála-Bádámi road for two miles to Malligar at twenty-five miles; passes Hangal at twenty-eight miles with a district bungalow; meets the Havanur-Samasgi road at thirty miles and the Harihar-Samasgi road at thirty-six miles; and passes Gondi at thirty-eight miles. At Gondi the road crosses the Vardha by a ford and outers Maisur. This road, which is fairly complete with gutters and catch-water drains, passes through the three important markets of Hangal, Maharajpeth, and Dhundshi. Large quantities of sugar, cardamoms, betelnuts, and other Maisur produce pass north along this road. The Masur-Mundargi road joins the south of Kod with the Ranebennur and Karajgi sub-divisions and with the large market of Mundargi in the Gadag sub-division. From Masur the road runs six miles northeast to Rattihalli, eighteen to Halgeti, twenty-two to Ranebennur, and about thirty-eight to Guttal on the Havanur-Samasgi road. For about twenty-four miles north of Guttal to the Gadag horder the road is not made. In these twenty-four miles the track crosses the Vardha at Belvigi by a ford, passes through the Shirhatti and Gudgeti sub-divisions, and enters the Gudag sub-division by the Virapur pass in the Kapatgud hills. For eight miles from the Virapur pass to Mundargi the road is made. Besides these chief lines, of small roads beginning from the north, the Kittur-Betgeri road runs twelve miles east from Kittur at 242 miles on the Poona-Harihar road in Belgaum to Betgeri in the north of the Dharwar sub-division. From Dharwar on the Poona-Harihar road four lines branch off, the Dharwar-Hebsur road running twenty miles east to Hebsur by Maragdi and Behatti, the Dharwar-Kalghatgi road running about twenty miles south-west to Kalghatgi, the Dharwar-Haliyal road running about twenty-two miles west to Mavinkop on the borders of Dharwar and Haliyal, and the Dharwar-Goa road running twenty miles nearly west towards Goa by the Tinki pass. From Navalgund a road runs twenty-eight miles east to Rou. From Kalghatgi a road runs about thirteen miles south-west to Tadas on the Dharwar-Kumta road. In the Kod sub-division in the south a road runs from Maisur about fourteen miles north-west to Chik-Kerur, and from Here-Kerur on the Masur-Chik-Kerur road a road runs fifteen miles east to Tuminhatti in Ranebennur.

All the Sahyadri passes by which the produce of Dharwar is carried west to the coast lie outside of Dharwar limits. Of passes to the west coast the Árbail and Devimani passes are the most important. Cotton mostly goes by these passes to Bombay. The Arbail pass which runs to Karwar lies twelve miles south of Yellapur in Kánara and sixty-five miles south-east of Dhárwár. The Devimani pass which runs to Kumta lies about twenty miles south of Sirsi in Kánara and ninety miles south-east of Dhárwár. Both passes are crossed by metalled and bridged cart-roads, eighteen to twenty-four feet broad. Besides these, the Tinái pass, about thirty miles north-west of Supa in Kanara and fifty-five miles west of Dhárwár, runs into Goa through part of Belgaum and Kánara. It is a bullock track, chiefly used for the import of cheap salt and salted fish from Goa. Within the limits of the district there are few important hill-passes. The only passes worthy of notice are the Sortur-Doni and Virápur passes in the Kapatgudd range. The Sortur-Doni pass, about three miles west of Doni in Gadag, can be crossed by carts and is used only for local traffic. The Virapur pass, about eight miles west of Mundargi in Gadag, is crossed by wheeled carriages and is used for local traffic from the south of the district to Mundargi market. In the two parallel ranges in the south of Kod there are three hill-passes in the north range, one leading from Hire-Kerur to Shikarpur in Maisur, another from Hire-Kerur to Masur, and a third from Ratiballi to Masur; and two on the southern range each about a mile and a half distant from the Marvali hill and leading to Shikarpur in Maisur.

Of three systems of railways, the East Deccan or Hotgi-Gadag. the South Deccan or Belári-Marmagaon, and the West Deccan or Poona-Londa railways which are being introduced into the Southern Marátha Country or Bombay Karnátak, Dhárwár has two sections, one a small length of about twenty miles of the East Deccan line between Malapur and Gadag, and the other a length of about ninety miles of the South Deccan between Harlapur from Belari and Alnavar where the South Deccan line enters the Belgaum district. After crossing the Malprabha river the East Deccan line runs for some distance in native territory, entering Dharwar at Malapur 154 miles south of Hotgi Junction. Thence it runs almost south keeping to the watershed that separates the valleys of the Bennihali and Hira. The whole line passes through the rich black cotton soil of the Dharwar plain, and as the watershed is wide, flat, and straight, the work of construction is easy. The line passes Hombal station at 1633 miles, and thence curving slightly eastwards, it joins the South Deccan line at Gadag 1731 miles south of Hotgi and ninety-The ruling gradient is one in 100 and the three west of Belári. limiting curve 2000 feet radius. The estimated cost is about £7200 (Rs. 72,000) a mile. This section of the line has no works calling for remark. The only stations are third class, at Alur 1431 miles, at Malapur 154 miles, and at Hombal 1634 miles.1

The South Deccan section enters Dhárwár a little east of the

is Chapter VI.

PASSES.

RAILWAYS.

¹ The mileages on the East Deccan are from Hotgi junction unless otherwise stated.

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RAILWAYS.

villago of Harlápur, and, running almost due east, reaches Gadag the junction of the South and East Decean sections ninety-three miles west of Belári and 1731 south of Hotgi. From Gadag the line passes almost straight through Annigeri to Dundur, 117 miles on the Benni river. It then makes a wide sweep south-westward to reach Hubli, 1294 miles, and then turning north runs to Dharwar. 1421 miles. After leaving Dhárwar, as it draws near the Sahyadris. it begins to wind, and passing Mugad and Kambarganvi enters Kánara at Alnavar 1654 miles. For ninety-three miles from Belári to Gadag the cost is estimated at about £6230 (Rs. 62,300) a mile. and for about 106 miles from Gadag to Douli at 199 miles the cost is estimated at about £8990 (Rs. 89,900) a mile. The chief bridge is the Bennihalli 116 miles, which has five 100 feet girder openings and is estimated to cost about £15,000 (Rs. 1,50,000). The other bridges though numerous are small. Except Gadag junction, which is a second class, all the stations are third class. Their positions aro Harlápur 81½ miles from Belári, Gadag 93, Annigeri 1074, Dundur 117, Hubli 1293, Dharwar 1421, Mugad 1511, Kambarganri 1584, and Alnavar 1654.

Besides the East Decean and South Decean railways a line from Hubli south to the important town of Harihar on the Tungbhadm river is in process of survey. As the exact emplacement of this line has not been settled in length, the following remarks are subject to modification. The proposed extension is about eighty miles of which the first sixty-seven miles are estimated to cost about £6200 (Rs. 62,000) a mile. The limiting gradient is one in 100 and the limiting radius of curvature 1200 feet. The proposed extension leaves the Belari-Marmagaon main line about 11 miles east of Hubli and runs south-east to Kundgol nine miles from the junction. From Kundgol it passes direct to Saonshi village fourteen miles, and then, running along a watershed, reaches at twenty-one miles the village of Gudagiri. Close to this village is the highest point on the extension, the line being more than 100 feet above rail level at Hubli. twenty-four miles is the village of Kalas. Up to this point all the ground passed over is black soil yielding rich crops of cotton, millet, and wheat. At Kalas it changes to a red and stony though not a barren soil. The line then falls rapidly till the main road joining the important villages of Savanur and Lakshmeshvar is crossed at Yelligi, Lakshmeshvar being about eight miles to the east and Savanur about five miles to the west. From Yelligi the line runs almost due south, and again passing into black cotton soil crosses the Vardha near the village of Kolur and runs forty-five miles to the village of Haveri. After this it again turns south-east, and twice crossing the main Poona-Harihar road it rises till it reaches the plateau on which is the village of Byadgi fifty-six miles. Here it turns still further east, and passing through a low range of heights composed of amorphous iron stone, and crossing the Poona-Harihar main road at fifty-nine miles runs sixty-six miles close to the east of the town of Ranebennur, with about 12,000 people and an important trade. Still further south the line

¹ Mileages on the South Deccan are given from Belári.

crosses a range of hills nine miles south of Ranebennur and passing the village of Chelgiri seventy-three miles, it strikes the banks of the Tungbhadra seventy-nine miles at a point about 1½ miles east of Harihar. The Tungbhadra at this place is said to require about 1000 feet of waterway. Stations are proposed at Kundgol nine miles, Saonshi fourteen miles, Gudagiri twenty-one miles, Yelligi 27½ miles, Hatimatur 33¾ miles, Haveri 45 miles, Byádgi 55 miles, The chief trade centres passed are Kundgol, Saonshi, Gudagiri, Kalas, Hatimatur, Háveri, Byádgi, Ránebennur, and Harihar. The prospects of this line are said to be bright. The people of the rich country it will traverse are reported to be most eager for its construction, and that the stations should be near their villages, a point of first rate importance which is too often overlooked.

On the roads within Dhárwár limits are twenty-two toll bars. In 1884-85 the twenty-two toll bars sold for £8753 (Rs. 87,530) against £6117 (Rs. 61,170) in 1883-84. Of the twenty-two tolls twelve are provincial and ten local fund. Of the twelve provincial tolls six are on the Poona-Harihar road at Heggeri, Unkal, Tirmalkop, Konimelihalli, Motebennur, and Kodiyal; four are on the Karwar-Belári road at Bardanhal, Shirguppi, Gadag, and Galginkatti; one is on the Havnur-Samasgi road at Basapur; and one is on the Dharwar-Tinhi pass road at Mugod. Of the ten local fund tolls three are on the Harihar-Samasgi road at Samasgi, Tilvalli, and Bhogávi; two are on the Tadas-Gondi road at Hosur and Malligar; and one each is on the Pála-Bádámi road at Bankápur, on the Kittur-Alagvádi road at Tadkod, on the Dharwar-Haliyal road at Saptapur, on the Dharwar Kalghatgi road at Kanvi-Honapur, and on the Hirokerur-Holbikond road at Holbikond. Of these twenty-two tolls the toll at Heggeri fetched £160 in 1884-85, at Unkal £680, at Tirmalkop £1200, at Konimelihalli £500, at Motebennur £370, at Kodiyal £510, at Bardanhal £893, at Shirguppi £700, at Gadag £550, at Galginkatti £693, at Basapur £47, at Mugad £120, at Samasgi £301, at Tilvalli 250, at Bhogávi £14, at Hosur £91, at Malligar £210, at Bankápur £151, at Tadkod £150, at Saptapur £572, at Kanvi-Honapur £171, and at Holbikond £320. Except at Tilvalli, Hosur, Malligar, and Bankapur where half rates are charged, the tolls charged are for every four-wheeled carriago 1s. (8 as.), for every two-wheeled carriage drawn by one animal 3d. (2 as.), for every two-wheeled cart or carriage 6d. (4 as.) if drawn by two animals and laden and 3d. (2 as.) if unladen, 9d. (6 as.) if drawn by four animals and laden and 41d. (3 as.) if unladen, 1s. (8 as.) if drawn by six animals and laden and 6d. (4 as.) if unladen, 2s. (Re. 1) if drawn by eight or more animals and laden and 1s. (8 as.) if unladen, 2s. (Re. 1) for every elephant, \$\frac{1}{2}d\$. (\$\frac{1}{2}\$ a.) for every camel horse pony mule buffalo and bullock whether laden or unladen, \$d. (\frac{1}{4} a.) for every ass laden or unladen; \$\frac{1}{4}d. (\frac{1}{12} a.) for every sheep goat and pig; 6d. (4 as.) for every palanquin or other litter whether carried by four or more bearers, and 3d. (2 as.) for every small litter carried by less than four bearers.

The chief bridge in the district is on the Poona-Harihar road over the Vardha river on the borders of Bankapur and Karajgi. It is Trade.
RAILWAYS.

TOLLS.

BRIDGES.

¹ Distances on the southern extension are counted from Hubli Junction.

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REST-Houses.

For the use of European travellers Dharwar has fourteen district and nine travellers' bungalows and for the use of native travellers it has thirty-six rest-houses. Of the fourteen district and nine travellers' bungalows five travellers' and three district bungalows are on the Poona-Harihar road, at Togur at 247 miles from Poona a travellers' bungalow, at Dharwar at 261 miles a travellers' bungalow, at Hubli at 274 miles a travellers' and a district bungalow, at Tirmalkop at 287 miles a travellers' bungalow, at Shiggaon at 301 miles a travellers' bangalow, at Motebennar at 327 miles a travellers' bungalow, and at Ranebennur at 310 miles a district bungalow; besides the two bungalows mentioned on the Poona-Harihar road at Hubli, three travellers' and two district bungalows are on the Karwar-Belari road, at Dastikop at eighty-seven miles from Kárwár a travellers' bungalow, at Annigeri at 123 miles a travellers' bungalow, at Gadag at 186 miles a district bungalow, at Dambal at 149 miles a district bungalow. and at Hesrur at 165 miles a travellers' bungalow; two bungalows are on the Hubli-Sholapur road, at Tirlapur at sixteen miles north of Hubli a travellers' bungalow, and at Nadgund at thirty-two miles a district bungalow; two district bungalows are on the Navalguad-Ron road at Navalgund and Ron; and of the remaining six district bungalows one each is at Gadag in Dharwar on the old Poons-Harihar road, at Kusugal in Mubli, at Jugalgi and Tadas in Bankapur, at Devgiri in Karajgi, and at Hangal. Of the thirty-nine rest-houses nine are on the Poona-Harihar road at Dhárwár, Hubli, Miniramankop, Tirmalkop, Shiggaon, Konimelehalli, Haveri, Motebennur, and Ranebennur; eight are on the Karwar-Belari road at Devikop, Kalghatgi, Nalavadi, Hulkoti, Gadag, Dambal, Mundargi, and Hesrur; five are on the Hubli-Sholapur road at Behatti, Tirlapur, Alagvadi, Nadgund, and Konnur; three are on the Tadas-Gondi road at Tadas, Dhundshi, and Hángal; and two are on the Harihar-Samasgi road at Tirvalli and Havasbhavi. Of the remaining twelve rest-houses four are in Dhárwar at Niralgi, Bandur, Padmangatti, and Hebli; one in Navalgund, at Navalgund; two in Ron at Ron and Yaongal; one in Hubli at Hebsur, one in Bankapur at Bankapur; one in Kod at Hirekerur; and two in Ranebennur at Halgheti and Byádgi.

FERRIES.

Of thirty-one ferries, all of which ply only during the rains, that is from June to October or November, twelve are across the Tungbhadra, six in Ránebennur, one each at Kusgatti, Mudenur, Airani, Hirebidri, Medleri, and Chandapur; two in Karajgi, one each at Harlahalli and Hávnur; and four in Gadag, one each at Gungol, Shingtalur, Korlahalli, and Hesrur: fifteen are across the Vardha, seven in Hángal, one each at Gondi, Honkan, Malgund, Havangi, Ballambid, Adur, and Kudla; and eight in Karajgi, one each at Sangur, Devgiri, Kalsur, Karajgi, Hossahitti, Akur,

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Marol, and Belvagi: three are across the Kumadvati, two in Kod. one each at Masur and Ratiballi, and one in Ranebennur at Kupelur: and one is across the Malprabha at Konnur in Navalgund. Of the thirty-one ferries, two, one at Konnur on the Malprabha and the other at Hesrur on the Tungbhadra, are provided with double ferry boats and a third at Karajgi on the Vardha has a single ferry boat. The remaining twenty-eight ferries are provided with leather covered bamboo baskets. The ferry boats, which are twenty-five feet long eight broad and three deep, carry fifty passengers or four laden carts, or 5000 pounds weight. The coracles or basketboats, which are made of split bamboos covered with half-dressed hides, are twelve to fifteen feet in diameter and three deep and do not cost more than £10 (Rs. 100) each. In making these basket-boats a number of pieces of split bamboos, perhaps twenty in all, are laid on the ground crossing each other near the centre, and fastoned at the centre with thongs; the ends of the bamboos are raised and fixed by stakes at due distances from each other and are there bound by other long slips of bamboo introduced alternately over and under the first crossed pieces, and tied at the intersections. When this is done, beginning from the bottom or centre, the parts above the intended height or depth of the baskets are cut off, and it is freed from the stakes, overset and covered with hides sewed together by thongs. When bullocks have to cross they are tied to the basket, goaded in the proper direction, and help to tow the boat At other times the basket is rowed over with paddles, or, when the water is not too deep, is pushed with bamboo poles. In the rains the Tungbhadra is very rapid, and if there has been a great fall of water to the north and west, the baskets have much difficulty in crossing. They sometimes take an hour though the distance is not seven hundred yards. The ferries are divided into four classes according to the number of times the boats can cross and recross the river in one day of fourteen hours. If a boat cannot make more than six trips across and back in a day, the ferry falls under the first class; if it can make seven to ten trips the ferry falls under the second class; if eleven to fifteen it falls under the third class; and if more than fifteen it falls under the fourth class. The fees charged for laden carts are 1s. (8 as.) in first class ferries, 9d. (6 as.) in second class, 6d. (4 as.) in third class, and 41d. (3 as.) in fourth class ferries. For unladen carts the charge is 7½d. (5 as.) in first class, 6d. (4 as.) in second class, $4\frac{1}{2}d$. (3 as.) in third class, and 3d. (2 as.) in fourth class ferries. For laden ponies, mules, and horned cattle, as well as for horses both laden and unladen, the charge is 4½d. (3 as.) in first class, 3d. (2 as.) in second class, and $1\frac{1}{2}d$. (1 a.) in third and fourth class ferries. For passengers, other than children who are allowed a free passage, the charge is $1\frac{1}{2}d$. (1 a.) in first class, $\frac{3}{4}d$. ($\frac{1}{2}$ a.) in second class, and $\frac{3}{6}d$. ($\frac{1}{4}$ a.) in third and fourth class ferries. In 1883-84 the ferry revenue amounted to £409 (Rs. 4090) against £272 (Rs. 2720) in 1882-83.

Dhárwár forms part of the Kánara postal division. Of forty-nine post offices one is a disbursing office, two are town sub-offices,

Post Offices.

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twenty-eight are sub-offices, and eighteen are village offices. Of the twenty-eight sub-offices and eighteen village offices twenty-fire sub-offices and seventeen village offices are within British limits and three sub-offices and one village office lie in the Bombar Kurnatak states. The dishursing office at Dharwar is in charge of a postmaster who draws a yearly salary of £120 (Rs. 1200). The two sub-offices at Dharwar and Betgeri, the twenty-five sub-offices within British limits at Amingeri, Bankapur, Byadgi, Dambsl, Dhundshi, Gadag, Garag, Gudgeri, Haugal, Haveri, Hebli, Rice-Kerur, Hubli, Kalghatgi, Karajgi, Mushrikot, Mugud, Mundargi, Nargund, Navalgund, Itanebennur, Ron, Savanur, Shiggaon, and Tumminkatti, and the three sub-offices in the Bombay Karastak states at Kundgol, Lakshmeshvar, and Shirbatti, are in charge of sub-postmasters, drawing £12 to £60 (Rs. 120-600) a year. Of the eighteen village post-offices the seventeen within British limits are at Abbigeri, Agadi, Alur, Arlikatti, Bammanhalli, Guitsl, Halgeri, Hulkoti, Kupelur, Kurtakoti, Mahardipeth, Motebenna, Mulgand, Narendra, Tadkod, Tadas, and Uppin-Betgeri, and on in the Bombay Karnatak states is at Dodrad. Of these eighteen village post offices seventeen are in charge of village schoolmosters who receive, in addition to their pay as schoolmasters, yearly allowances varying from LB 12s. to £7 4s. (Rs. 36-72), and the remaining one is in charge of a local resident who is paid a yearly allowance of £3 12. (R- 36). In towns and villages which have post offices, letters are delivered by twenty-one postmen, of whom two draw yearly salaries of £12 (Rs. 120) and the remaining nineteen of £9 12x (Rs. 96). In some of these villages, besides by the twenty-one postmen, letters are also delivered by postal runners who receive yearly £2 8. (Rs. 21) for this additional work. In small villages without post offices, letters are delivered by forty-four postmen. Of these, thirteen are paid yearly from £9 12s, to £12 (Rs. 96-120) from the Imperial post, and the remaining thirty-one are paid yearly from £10 16s, to £12 (Rs. 108-120) from the Provincial post. Except at all the village offices and the seven sub-offices at Bridgi, Dambal, Dhundshi, Garag, Hebli, Mugud, and Tumminkatti where money orders only are issued, money orders are issued and savings banked at all the post offices of the district. Mails to and from Bombay are carried by the Great Indian Peninsula. Railway between Bombay and Poona; the mails between Poona and Dharwar are carried in pony carts or tanga dáks, which run from Poona to Hubli through Satara, Kolhapur, Belgaum, and Dharwar. The post offices are supervised by the superintendent of post offices, Kanara division, who has a yearly salary of £360 (Rs. 3600) riving to £480 (Rs. 4800) in five years. The superintendent is essisted in Dharwar by an inspector who draws £96 (Rs. 960) a year and whose head-quarters are at Shiggnon.

TELFGEARM.

There are three telegraph offices at Hubli, Dhárwár, and Gadag. Since the beginning of British rule in 1817 the making of good

¹ Trade and Craft details are chiefly compiled from materials supplied by Ráv Bahádur Tirmalráv Venkatesh.

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trunk and local roads, the opening of the south-eastern branch of the Peninsula railway, and the regular service of steamers along the western coast have caused a great change in the trade system of Dhárwar. Direct trade with Barsi and Vairag in Sholapur, Umrávati in Berár, Hamnabad near Bedur in the Nizam's territory and other places on the north and east, and with Rájápur on the Ratnágiri coast has ceased. Except in rural parts where there are no made roads head-loads, bamboo-loads, pack-bullocks, and horses are no longer used. In the trade which sets north and east all imports, consisting of European woollen printed and plain cloths, yarn, silk, stationery, hardware, musk, saffron, and sugarcandy from Bombay; silk and cotton cloths from Nágpur and Paithan on the Godávari; lace cloths from Benares; plain and lace-bordered headscarves and coloured women's robes from Rajmandri, Nellur, Guntur, and Tádpatri; and lamp glass to make bangles from Belári come by rail as far as Sholapur or Belari, and from Sholapur and Belari are brought into the district by carts, or on ponies. Similarly, of late years, the copper and brass vessels of Hubli, the cardamoms pepper and cocoanuts of Kanara, and the millet, sugarcane, molasses, cotton, and cotton robes and silks of Betgeri, Byádgi, Dhárwár, Dhundshi, Gadag, Hubli, Mundargi, Navalgund, Ranebennur, and Ron pass east to Belári; and the cotton robes and blankets of Gadag, Hubli, and Ránebennur, and the cardamoms pepper and cocoanuts of Kánara pass north-east to Sholápur. Again between October and May cotton goods, yarn, silk, hardware, opium, liquor, and other stores from Bombay are brought by steamers and sailing vessels to Kárwár and Kumta in Kánara, and from Kárwár and Kumta travel east in carts by the A'rbail and Devimani passes. Similarly, of the exports that go to Bombay by Karwar and Kumta, the chief are cotton, wheat, bájri, clarified butter, molasses, linseed, sesamum, and occasionally coarse waistcloths and women's robes; and, besides these, of other articles that go to smaller ports between Bombay and Manglor, the chief are cotton seeds, oilcakes, onions, garlic, chillies, pepper, cardamoms, and myrobalans. The leading traders are Lingáyats, Bráhmans, and Musalmáns. Of

these the Lingáyats are by far the largest class, and the Musalmáns are few and seldom rich. At Gadag and other places in the east of the district there are a few Márwár Vánis. At Hubli and Gadag two European firms Messrs. Robertson Brothers and Company and Messrs. P. Chrystal and Company trade in cotton oilseed myrobalans and wheat. Except the ironware trade, which is generally in the hands of Gujarát Bohorás and of local Musalmáns, and the trade in leather which is carried on solely by Musalmans and lowcaste Hindus, the different branches of trade are open to all. In the 1876-77 famine, when other trade was at a stand, moneylenders, clothmerchants, cotton-brokers, and dealers of all kinds imported grain. Of large traders who have a capital of £20,000 (Rs. 2,00,000) and upwards, there are not more than two houses: One at Gadag belongs to the Gujar trader Venkatidas, who, besides lending money and granting bills, trades in cotton, and the other at Ranebennur belongs to Brahman traders, Gopál and Shrinvas Náik, who, besides lending money, trade largely in cotton, Europe and Bombay machine-spun

Traders,

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yarn, silk, cotton waistcloths and women's robes, indigo, and Maisur bullocks and cows. Of grain dealers few, perhaps not more than ten, have a capital of more than £5000 (Rs. 50,000). The European firms at Hubli and Gadag, which have been established within the last thirty years, have as much as £10,000 (Rs. 1,00,000). In addition to their regular business traders employ their capital in moneylending. The leading Hubli merchants trade on their own account and with their own capital, in the cotton season (October-May) supplementing their capital by borrowing from the Hubli branch of the Bank of Bombay. The same traders carry on both an import and an export trade. They have generally agents or corresponding houses at Bombay, Poona, Satara, Ahmadnagar, at Bársi Sholapur and Vairag in Sholapur, at Rajapur and Vengurla in Ratnágiri, at Kumta and Kárwár in Kánara, at Hamnabad in the Nizam's country, at Baugalur in Maisur, and at Belari Salem and Tadpatri in Madras. Some of the largest deal direct with Bombay and other leading markets, Poona, Sholapur, Kumta, Belari, Bangalur, and Manglor, exporting cotton and importing sugar and hardware, cotton goods, and other articles of European manufacture. Except cotton sales between local dealers and Bombay firms, which are negotiated by bills, almost all purchases are paid in silver.

TRADING COMPANIES,

At present (1883) Dharwar has two trading joint stock companies in the towns of Dharwar and Hubli. In April 1876 a joint stock company, chiefly for the export and import of cloth, under the name of the Dharwar Company, was started at Dharwar by a few traders. with a capital of £1187 10s. (Rs. 11,875) divided into 475 shares of £2 10s. (Rs. 25) each. Since 1876 the company has increased the number of its shares to 1600, making a capital of £4000 (Rs. 40,000). Up to the end of 1883, of the 1600 shares 1282 equal to a capital of £3205 (Rs. 32,050) have been taken by 143 persons, of whom 132 are Brahmans, five Lingayats, three Komtis, one a Mudliyar, one a tailor, and one a shepherd. Of these 143 persons eighty-five are Government servants, fifteen students, thirteen traders, eight men of means, seven landholders, five pleaders, four Government pensioners, four Brahman priests, one editor of a native newspaper, and one contractor. The object of the company has been to import cloth from Bombay, Poona, Ahmadabad, Benares, Belári, and Bangalur. The chief cloths imported are from Bombay, European cotton plain and prints, broadcloth, silk, and waistcloths and women's robes; from Poona and Sátára, Núgpur, Yevla, and Poona-made lacebordered and plain silk waistcloths and women's robes, and silk borders called dals to be sewn to plain cotton cloths; from Benares and Ahmadabad, lace robes, gold lace cloth, and lace; from Belári and Tadpatri, headscarves and turbans; and from Bangalur, lacebordered head and shoulder scarves, waistcloths, and women's robes, and nimbavali pattalas or bright yellow female robes and bodicecloths, both with bugdi borders that is with one plain and two ornamental stripes. Besides these, from Shahapur in Belgaum, and Guledgud in Bijápur, waisteloths, women's robes, and bodicecloths are also brought. The nimbárali pattalas from Bangalur and the bodicecloths from Guledgud, which are the best of their kind, are in great local demand. In addition to the cost of carriage to

Dhárwár and Hubli, the company sell their stock at a net profit of 61 per cent on the original purchase. The company also buy the produce of local hand looms and towels and thick cloths made in the Dhárwár jail, and send them to order to Belári, Belgaum, Bombay, and Poona. On the 31st of August of every year the company balance their accounts, and out of the net profits, after deducting the cost of establishment and carriage, they leave aside one to five per cent for charity, and five per cent for the reserve fund; and the rest they declare as dividends. During the eight years ending 1883 the yearly dividends declared by the Dharwar cloth company have varied from fifteen per cent in 1878 to six per cent in 1882, the details being 93 per cent in 1876, twelve in 1877, fifteen in 1878, eleven and quarter in 1879, nine in 1880 and 1881. six in 1882, and eight and quarter in 1883. Since 1877 a branch of the Dharwar company has been opened in Hubli, the accounts of which are included in those of the head office at Dharwar. The managing body of the company consists of four directors and two agents, one of whom lives at Dhárwár and the other at Hubli. The conditions of the Dhárwár company are that no sharer can withdraw his capital, within two years from the date of his taking the shares; and that he must give notice of withdrawal two months before the 31st of August, when the accounts of the company are balanced. In that case he will get his capital together with his dividend, after the general committee has held its meeting. If he wishes to withdraw his money before the closing of accounts on the 31st of August, he will get it back, two months after the date of his notice; but without his portion of the dividend and minus 2s. (Re. 1) for each share. If a sharer takes up a share before the 5th of a month, he will get his share of the dividend for that month; but if he takes it up after the 5th, he will get no dividend for that month. In the beginning of 1878, a rival Hubli cloth company was formed with a nominal capital of £4000 (Rs. 40,000) divided into 200 shares of £20 (Rs. 200) each. Up to the end of 1883, of the 200 shares 110 equal to a capital of £2200 (Rs. 22,000) have been taken by fifty-four persons of whom twenty-five are Brahmans, twenty-four Lingayats, two Jains, one a Raddi, one a Musalman, and one a Maratha. these fifty-four shareholders, forty are traders, eight Government servants, three pleaders, two landholders, and one a person of means. The business and imports of the Hubli company differ little from those of the Dharwar Company except that the Hubli Company also import Europe and Bombay machine-made yarn from Bombay and sugar from Bangalur. On the 31st of December of every year the company balance their accounts, and out of the net profits, after deducting the cost of establishment and carriage, they leave aside one per cent for charity and ten per cent for the reserve fund; and the rest they give as dividends to the shareholders. During the six years ending 1883 the yearly dividends declared by the Hubli company varied from twelve per cent in 1879 to nothing in 1882. The details being ten per cent in 1878, twelve in 1879, seven and half in 1880, nine in 1881, nothing in 1882, and eight and half in 1883. As the company suffered a heavy loss in one transaction, no dividends were declared for 1882. The conditions of the Hubli

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company are that no shareholder can withdraw his capital invested in the company's shares. If he wants money, he must sell the shares privately.

Of the ten chief trade centres five are both wholesale and retail and five are exclusively wholesale or padmuli (K.) centres. The five wholesale and retail trade centres are Hubli and Dharwar in the west, Navalgund in the north, Gadag in the east, and Ranebennar in the south. The padmuli or wholesale trade centres are Mundargi in Gadag, Byádgi in Ránobeunur, Háveri in Karajgi, Dhundshi in Bankapur, and Nadgund in Navalgund. Of the five wholesale and retail trade contres Hubli and Gadag are the most important.

Hubli.

Before the Kanaresecountry was divided into Dharwar and Belgaam and before the Belgaum-Vengurla road was made, HURLI was the greatest trado centre in the Kanarese districts. At present (1883) Hubli comes next to Belgaum. Hubli has about 700 traders mostly Lingáyats, Jains, Komtis, Bráhmans, Gujarát and Márwár Vánis, Devangs, and Musalmans. Of these about 300 have capitals of £500 to £10,000 (Rs. 5000-Rs. 1,00,000). Almost all are independent The chief articles of local growth are wheat, millet, pulse, sesamum seed, and other grains, and cotton, molasses, and of hand-woven cotton cloth, coarse and fine waistcloths, and women's robes, hachadas or coarse long cloths, silk cloths with or without lace borders, ralli or children's scarres, carpets, and blankets. The chief imports are, English and Bombay machine-spun yarn, China silk, musk, saffron, and kerosine oil from Rombay in the north, chiefly by Kumta and Karwar; turmeric, mill-drawn castor oil, headscarves, chintz, and cuminseed from Belari in the east: coconnuts, cocoa kernel, hemp, sugar, and blankets from Dhavangeri in Maisur; molasses, sugar, red sugar called maktumisákri, and chillies from Shimoga in Maisur; and betelnuts, cardamoms, popper, and sandalwood from Kanara. The chief exports are, cotton, oilseed, handworen cloth, tamarind, sweet oil, cotton seed, onions, and horns and hides, some passing cast by rail from Belari to Madras and Haidarabad and others passing west by sea from Karwar and Kuinta to Bombay. At Hubli a market is held on Saturday.

Gadag.

GADAG has nine large traders with capitals of £500 to £20,000 (Rs. 5000 - Rs. 2,00,000). Of these two are Europeans, six are Lingáyats, and one is a Gujarát Váni. They are all independent traders. The chief export is cotton by rail from Belari and by sea from Karwar and Kumta to Bombay. The chief imports are, cloth, cotton yarn, and silk. During the last twenty years the greatest change has been the fall in the value of the export trade in raw cotton. At Gadag a market is held every Saturday.

Byddgi and Mundaroi.

Of the wholesale or padmuli (K.) centres, Braner lies close to Maisur on the south and to Kanara on the west. On every Saturday and Sunday when markets are held, Maisur and Kanara traders and husbandmen bring large quantities of rice, millet, wheat, pulse, molasses, sugar, chillies, betelnuts, coconnuts and cocoa-kernels, and cocoa-oil, and sell them wholesale to traders who come to Byadgi from Dharwar, Hubli, and other parts of Dharwar, as well as from Belari and Bagalkot. In the same way, at Mundardi.

which lies close to Belári and the Nizám's dominions, and where markets are held every Tuesday and Wednesday, traders and husbandmen from Belári and the Nizám's country sell the same goods wholesale to traders who come to Mundargi from Dharwar, Hubli, and other parts of Dhárwar, as well as from Shimoga, Dhávangeri, and Cuitaldurg in Maisur and from Sirsi in North Kánara. These purchasers retail the goods on their way home and in their villages.

HÁVERI, sixty miles south of Dhárwar, has about twenty-five traders with a capital of £100 to £5000 (Rs. 1000-Rs. 50,000). Most of the traders are Lingáyats and a few are Jains and Bráhmans Of the twenty-five traders four, two Lingayats one Jain and one Brahman, have capitals of £1000 to £5000 (Rs. 10,000-Rs. 50,000); the rest have capitals of £100 to £500 (Rs. 1000-Rs. 5000). Haveri is the chief wholesale or *padmuli* trade centre for cardamoms, betelnuts, and pepper. These articles come in large quantities from Maisur and Kanara and are either exported in bags direct to, or sold to agents of, Belári, Haidarabad, Bangalur, Poona, and Bombay merchants. Every year between the months of Ashvin and Vaishakh (October-May), Lingáyat and Havig or North Kánara Bráhman husbandmen bring to Haveri in strong hemp-fibre bags about twelve tons (1000 mans) of cardamom berries, which the Lingayat Gujarati and Marwari traders from Sholapur and Hamuabad and local Lingayat traders buy at £8 to £10 (Rs. 80-100) the man of twentyfive pounds. When cardamom berries are brought from the Kanara and Maisur forests they are small and dirty; at Haveri the traders add to their appearance and their size by scraping cleaning and soaking them. The berries are first washed in a solution of the water of a particular brackish well at Haveri and a few soapnuts and sikikais the unripe acid fruit of the Mimosa abstergens; they are again washed in the brackish water and country soap and spread on a mat to dry.1 During the night plain water is sprinkled on them, and the next day, after drying them in the sun, they are tied for four or five hours in blankets. Hundreds of women, mostly Lingáyats and a few Maráthás and shepherds, are employed in cutting the edges of the cardamom berries. For this they are paid $1\frac{1}{2}d$. the pound $(\frac{1}{2}a$ the sher). In one day a woman cuts about three pounds (6 shers) of cardamom berries. The whole process of cleaning about 200 pounds (8 mans) of berries takes four days for twelve men and costs about 16s. (Rs. 8). In addition to the cleaning, the edge-cutting costs about 10s. (Rs. 5), that is a total outlay of £1 6s. (Rs. 13). The berries are then separated into first, second, third and fourth sorts. Before they are sent out of the district, the berries are filled in bags of strong cotton cloth, each containing about ninety pounds (31 mans). The cotton bags are covered with date-leaf mats and again put into hemp-fibre bags. In these bags cardamoms are sent to Bombay, Poona, Haidarabad, Belári, and

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² The well from which the brackish water for washing the cardamem berries is brought, is fifty-six feet deep, and, in March 1884, contained water to a depth of about twenty-six feet. It lies near the monastery of Sivlingappa in the Navipeth etreet at Haveri. As the water is saltish it is used only in bathing and washing clothes, and not in drinking.

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other places. In 1884 the ruling prices were £18 (Rs. 180-200) the man of twenty-five pounds for the first sort, £15 to £17 (Rs. 150-170) for the second sort, £12 10s. to £13 (Rs. 125-130) for the third sort, and £10 to £11 (Rs. 100-110) for the fourth sort. Kánara cardamoms are of larger size, but Maisur cardamoms have the stronger flavour. Of late the process of cleaning cardamom berries and cutting their edges has been started at Sirsi. Betelnuts come to Haveri in large quantities from the Kanara and Maisur spice gardens. The Lingayat Gujaráti and Márwári dealers from Sholapur, Hamnabad, Belári and a few local Lingávat dealers buy the betelnuts at 12s. to 12s. 6d. (Rs. 6-61) the man of twenty-five pounds. The nuts are then handed to Lingáyat Maráthi and shepherd women who sort them into the four classes of best and middling chikni, and best and middling bhardi. In one day a woman sorts about fifty pounds (2 mans) of betelnuts for 3d. (2 as.). The dealers then pack the nuts into strong hemp-fibre bags, each containing 100 to 125 pounds (4-5 mans), and send them to Bombay, Poona, Sholapur, and Hamnabad, where in 1884 they fetched £1 4s. (Rs. 12) the man of twenty-five pounds for the best chikni, 16s. (Rs. 8) for the middling chikni, 12s. (Rs. 6) for the best bhardi, and 10s. (Rs. 5) for the middling bhardi. Taking the four classes together, the dealers get on an average about 15s. 6d. (Rs. 73) the man of twenty-five pounds. Besides these four kinds of betelnuts, five other kinds are sold at Haveri in small quantities, kesrichur, khaddichur, naregal, lavangchur, and battal. When cut into small long pieces of the size of a fine needle, the best chikni betelnut is called kesrichur as it looks as fine as kesar or saffron fibres; when cut into small pieces of the size of a thick needle, it is called khaddichur; and when cut into thin slices like wafers, it is called naregal, that is, the betelnut made at the village of Naregal near Háveri. These three kinds are made to order in small quantities and are presented to friends as a rarity. Of these the kesrichur fetches 2s. 3d. (Rs. $1\frac{1}{6}$) the pound, the khaddichur 1s. $1\frac{1}{6}$ d. (9 as.), and the naregal 1s. 6d. (12 as.). When cut into about sixteen long pieces, the bhardi or coarse betelnut is called lavangchur that is of the size of lavany or clove, and fetches $9\frac{1}{2}d$. the pound $(6\frac{1}{2}$ as. the sher). From Tirthahalli and Simoga in Maisur betelnuts cut into two and called battal that is cup-shaped, are brought to Haveri by Havigs and Tulus, and fetch 16s. to 18s. (Rs. 8-9) the man of twenty-five pounds. The lavangchur and battal beteinuts are sent in small quantities to Belári and other parts of Madras. The average yearly export of betelnuts from Háveri is estimated to be worth £10,000 to £12,000 (Rs. 1,00,000 - Rs. 1,20,000). Besides cardamoms and beteinuts large quantities of pepper come to Háveri from the Kánara and Maisur gardens. Unlike cardamoms and betelnuts pepper is neither cleaned nor sorted in Haveri. Háveri pepper goes east to Belári and Haidarabad, north to Sholapur, and by Belgaum and Vengurla to Bombay. The sales of pepper at Haveri average 300 to 400 pounds and the ordinary price is about 6d. (4 as.) a pound. At Háveri a market is held every Thursday. Within the last twenty years, next to Nadgund, Dhundshi, thirtythree miles south of Dhárwár, was the chief wholesale mart in the

district. Since the making of good roads from Kumta and Hubli to

Dhundshi.

Kárwár most of the trade has passed from Dhundshi to Hubli. Dhundshi has about 250 traders, mostly Lingáyats, Jains, and Musalmáns. Of these about six have capitals of £1000 to £5000 (Rs.10,000-Rs. 50,000). The larger traders buy betelnuts, cocoanuts, molasses, sugar, red pepper, salt, oil, and tobacco, which are brought for sale by the growers from Maisur and south Dhárwár. These articles the wholesale dealers sell either to small local traders for local use or to traders of Hubli, Navalgund, and Nadgund. None of the Dhundshi traders export directly. Until 1857, when the chief of Nadgund rebelled, Nadgund was the greatest wholesale mart in the district. Since 1857 the trade has greatly fallen though it still is a small wholesale centre.

Besides at the ten chief trade centres, weekly markets are held at almost all towns and large villages where mamlatdars or sub-judges hold their offices, or which were formerly the head-quarters of the village-groups called parganás, maháls, tarfs, or karáyats. Except the ten trade centres, where the attendance varies from 10,000 at Hubli to 3000 at Haveri, most weekly markets are attended by less than 1000 people. Markets are generally held in the middle of the town or village from eight in the morning till five in the evening. They are both distributing and gathering centres. The chief articles sold are cloth, copper and brass vessels, earthen pots, salt, chillies, molasses, sugar, coriander, mustard, cumin, menthia or Greek grass seed, pepper, turmeric, vegetables, lamp-oil. fuel, and dry cowdung-cakes. The sellers are chiefly shopkeepers of the town and to some extent local growers. The buyers are people of the towns and of the neighbouring villages. There is little barter.

In almost all villages where there are one or more Hindu temples, and in about one-fourth of the villages where there are one or more mosques and tombs, small yearly fairs called jútris are held to celebrate a festival in honour of a deity or a saint. When a car is drawn the fair is called a teru (K), and when it is held in honour of a Musalman saint it is called an urus (H). These gatherings are too small to have much trade importance. None of the Dharwar fairs are on so large a scale as those held at Maheji in Khandesh or at Pandharpur in Sholapur. The three most important fairs are one each at Yemmur in Navalgund, at Gudguddápur in Ráncbennur, and at Hulgur in Bankapur. Of these the Yemmur and Hulgur fairs are held in honour of Musalman saints and the Gudguddapur fair in honour of The chief articles sold at these fairs are Malhári or Shiv. waistcloths or dhotars, women's robes or sádis, ready-made jackets and trousers, small carpets, copper brass and iron vessels, lamps, small metal boxes, toys, sugar, rice, pulse, sweetmeats, flowers, fruits, country liquor, needles and thread, combs, redpowder, perfumes, false pearls and coral, beads, and matches. The Yommur fair is held in March, lasts four or five days, and is attended by about 50,000 The estimated value of the goods sold is about £200 (Rs. 2000). The Gudguddapur fair is held in October, lasts for two days, and is attended by about 12,000 people. The estimated value of the goods sold is about £80 (Rs. 800). Between 1834 and 1862 the Hulgur fair was yearly visited by the Nawab of Savanur Chapter VI. Trade.

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Chapter VI. Trade. with a strong retinue, and was largely attended by wrestlers, dancing girls, beggars, traders, and others. Since the death of the Nawab in 1862, the Hulgur fair has lost its importance.¹

Shopkeepers,

Except some villages in the west, almost all large villages have shopkeepers. The village shopkeeper as a rule is a Lingayat: he occasionally is a Jain, a Komti, or a Musalmán. They deal in all groceries, salt, grain, pulses, spices, chillies, tobacco, sugar, molasses. clarified butter or tup, and in the larger villages in cloth; people generally buy cloth and all miscellaneous articles not of daily use either from the head-quarters town of the sub-division or at some market town to which such articles are brought by shopkeepers on market days. The shopkeepers gather their stock-in-trade from Some of it is received in payment of money lent, various sources. some in return for advances of grain to the poorer husbandmen, and some from larger dealers in one or other of the leading trade centres, such as Hubli, Gadag, and Dhundshi. Village shopkeepers never buy straight from Bombay. It is usual to pay ready money for articles sold, but running accounts, which are generally made up once a month, are sometimes kept. Only the large shopkeepers remain all the year at a central village; the smaller ones travel to all the village markets within a radius of twenty or thirty miles of their homes.

CARRIERS.

Carriers carry either in carts or on pack-bullocks and ponies. They are Lingáyats, Komtis, Devangs, Kurnbars, and Ade-banajigers. Pack-bullock and pony carriers sell from village to village small quantities of tobacco, betelnuts, and other miscellaneous articles; in addition to these articles cart-carriers sell grain and cloth. Carriers buy their stock from large shops and from the growers.

Imports.

The chief Imports are: Of building materials, rafters, posts, small cross rafters, and bamboos are brought from Kanara either by housebuilders or wood-sellers, and nails, screws, and other iron articles are brought from Bombay by Musalmán shopkeepers to the leading local trade centres. In ordinary years little grain is imported. Of metals, gold and silver bars and sheets of copper brass iron and tin are imported from Bombay. Of house furniture, large town traders bring copper and brass pots from Poona Belgaum and Nágpur, and clocks, watches, and glass and Chinaware from Bombay. Of food drink drugs and stimulants, sugar, palm-molasses, turmeric, and cuminseed come from Maisur, cocoanut kernel and oil, betelnuts, cardamoms, and pepper from Kánara and Maisur, and sult from Kánara. Wine is brought from Bombay and sold in small quantity by Pársi shopkeepers. Drugs are brought in small quantities from Bombay; gánja that is hemp flowers and bháng that is hemp leaves are brought from Vairág, Bársi, and Tásgaon by liquor-contractors. Opium comes from Bombay and is sold wholesale at Government treasuries to licensed shopkeepers and by them is retailed to the people. and appliances, penknives, pickaxes, and spades are brought from Bombay and Madras. Of dress, mánjarpáts or longcloths, printed cotton cashmere cloth, European and Bombay made piece-goods, cotton and silk lace, and coloured and

¹ Details of these three fairs are given under Places.

uncoloured silk, and steam-spun yarn are brought from Bombay¹; cotton and silk rumáls or headscarves, dhotars or waistcloths, woollen carpets and woollen waistcloths, and red handkerchiefs are brought from Madras; shawls, sádis or women's robes, bodicecloths, and yellow sheets from Bangalur; turbans from Madura; and fine muslin from Masulipatam. No ornaments are imported. Of dyeing materials indigo comes from Madras. Of toys, cards, chess, marbles, and children's hand-balls are brought from Bombay and Madras. Of fuel firewood is partly brought from the Kánara forests and partly gathered in small quantities from local forests and fields. A few ponies are brought by Pendháris from Pandharpur and a few Arab horses from Bombay; carts and pony carts are made in the district.

Cotton is the most valuable of Dhárwár exports. During the five years ending 1883 the average quantity of cotton which has left the district is about 9500 tons worth £450,000 (Rs. 45 lákhs). Of the whole amount about one-third is saw-ginned Dhárwár or American and two-thirds Kumta or local cotton. According to rough estimates by Bombay merchants and cotton dealers of the American or as it is called saw-ginned Dhárwár received at Bombay, about sixty-eight per cent is (1883) from Dhárwár and the remaining thirty-two per cent from Belgaum, Bijapur, and the Bombay Karnatak states, and of the Kumta or local Karnátak cotton about sixty-eight per cent comes from Belgaum and Bijapur and thirty-two per cent comes from Dhárwár. Since 1854 when Mr. A. C. Brice, the senior partner of Messrs. Brice and Company, started a large cotton business, Dhárwár has had European cotton agents as well as agents of Bombay European houses, who do business with Bombay in full-pressed bales of saw-ginned Dhárwár. The business of native dealers in saw-ginned Dharwar is entirely in bundles or dokrás. Almost the whole trade in Kumta or local Dhárwár cotton is in the hands of Bombay native merchants, chiefly Cutch Vániás and Bhátiás and a few Kánarese Bráhmans. Some business is done between Bombay and Dhárwár dealers at the South Konkan ports. There is considerable variety in the arrangements under which cotton is prepared in Dhárwár and sent to market. Many landholders sell their own cotton direct to the exporter. They clean it, pack it in bundles or dokrás of 164 to 196 pounds and sell it to a dealer, who may be either a native or a European and is generally a native. Some, but this practice is becoming less common every year, sell their seed cotton, that is their unginned cotton, to a large merchant, who gins and packs it. In other cases the grower does not sell locally, but gins his cotton, packs it on carts, and takes it to the coast, where he either sells it or ships it through a broker to Bombay. Gin-owners and cotton dealers often make advances to landholders to secure the growing crop of cotton. The landholder agrees to deliver a certain quantity of seed cotton by a certain date, If the quantity falls short, or the crop fails, the landholder has to Chapter VI.
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¹ The term manjarpat is perhaps a corruption of Manchester Peth that is cloth made at Manchester town. The term is now applied to longeloth woven in the Bombay mills. Rato Bahadur Tirmalrav. According to Molesworth majarpat is a corruption of madarpat that is cloth woven at Madrepollam.

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pay interest on the money he has received until he completes the delivery of the cotton agreed on, which is generally in the Advances are also occasionally made on the following season. standing crop, the person advancing the money taking all risks. A dealer rarely lends money to a landholder on the security of the crop. If he does the landholder pays interest until he has sold his cotton, when he refunds the amount he has borrowed. These arrangements are all carried on under regular bonds. Since the extreme rise in the value of cotton during the American War in 1864-65 the growers have generally been in a position to exact terms which are more in the grower's than in the dealer's favour. In some cases cotton dealers and gin-owners receive advances from wealthy brokers, who have undertaken to supply European houses with cotton at a fixed date. The petty dealer or gin-owner makes over the cotton according to agreement, and the broker sells it to the European firm at the rate agreed on, or, if he has been working with the European merchant's money, he is paid by commission. Agents of Bombay native dealers in the cotton growing districts, partly advance money to the growers and partly buy in the local markets. The chief local cotton markets are Hubli, Gadag, and Dhárwár. The details of the business are carried out by middlemen, who have largely increased in number during the last few years owing to the keener competition among European buyers. Though much sawginned Dhárwár comes to Bombay in full-pressed bales, the difficulty of the land journey forces considerable quantities to be sent in the much lighter and handier bundles or dokrás. As its name shows Kumta in North Kanara was formerly the chief port of shipment for Dhárwár cotton. At present (1884) almost the whole crop of Dhárwár cotton goes to Bombay, about two-thirds going from Kumta and one-third from Kárwár. A little both of saw-ginned Dhárwár and of Kumta cotton, both in steamers and in native boats from Kumta and Kárwár, reaches Bombay in April. But no large supplies either of saw-ginned Dharwar or of Kumta are available till about the end of May. So that except in seasons when the rains hold off no large quantities reach Bombay before the beginning of the rains (June 7th-15th). Of saw-ginned Dharwar, on a rough estimate about & goes by Kumta and & by Karwar; of Kumta about goes by Kumta, 4 by Karwar, and 4 is used locally. Occasionally a little cotton is sent to Madras by Belári. In an ordinary season, under existing conditions that is with good roads but no railways, about f of the saw-ginned Dharwar and t of the Kumta which is a later crop reach Bombay before the south-west rains. Of the rest, except a little which sometimes goes to Belári either for local use or for Madras, the whole is packed during the rains (June-November) in Dhárwár store-rooms. Of this stored cotton about two-thirds is kept loose, one-third in bundles or dolerás, and little or none in pressed bales. A large quantity of cotton, roughly averaging about 8000 bales, is often kept at Kumta during the rains the amount depending on the date of the break of the monsoon which stops shipping. According to the state of the Bombay market the supplies which have been kept in Dharwar stores and godowns during the rains begin to come forward in September and October, getting from Dharwar to the coast chiefly in October and November and reaching Bombay

as a rule before the close of December. Of the Dhárwár cotton which goes to Bombay by sea about & goes in native boats and & in steamers. In average seasons the whole cotton crop leaves the district by the middle of the following season, that is by about the end of The opening of the new lines of railway through Dharwar and to the coast will greatly add to the value of the Dharwar cotton crop. It will be possible to press and ship considerable quantities from Marmagaon before the close of May and by land to stations on the South East and West Deccan railways during the whole of the rains. Before the opening of the Suez Canal (1869) much saw-ginned Dharwar went by ship to Liverpool and was forwarded from Liverpool to the continental ports. The chief continental ports which use saw-ginned Dhárwár are Cronstadt, Odessa, Revel, Trieste, and Venico. At present (1884) saw-ginned Dhárwár finds little favour with English spinners, the seed has grown poor and the gins have fallen out of repair. The bulk of what is exported goes to the continent of Europe, but the quantity exported is small. Probably more than half the outturn is used in the Bombay spinning mills where its whiteness makes it valuable for mixing. strong and fairly long staple makes Kumta particulary well suited for spinning the lower counts of yarn up to thirties and for this purpose it is largely used in the Bombay mills. Twenty years ago Kumta cotton was in favour among Lancashire and Glasgow spinners and was largely exported; and were it not grossly adulterated with seed it would still find a ready market in England and on the continent of Europe. Till 1847 cotton was carried to the coast on bullock-back at a cost averaging about 12s. (Rs. 6) for every bullock-load of 250 pounds. Bullock carriage ceased about 1861, when the Dharwar-Kumta road by the Devimani pass was opened and carts came into general use. At first, owing to the cheapness of grass and grain, the cart hire from Dhárwar to the coast averaged about 12s. (Rs. 6) the khandi of 784 pounds or less than one-third of the old pack-bullock charge. During the American Civil War cart rates ran to £3 to £4 (Rs. 30-40) and even higher. Since 1865, with the increase in the number of carts, the rate has gradually fallen to 16s. (Rs. 8) to Kárwár and £1 (Rs. 10) to Kumta. To this have to be added a cart broker's fee of 3d. (2 as.) and $1s.4\frac{3}{4}d.$ (11\frac{1}{4} as.) for tolls. With slight variations 19s. (Rs. 9\frac{1}{2}) may be taken to represent the average cost of carting one khandi of 784 pounds of cotton from the Dharwar cotton fields to the coast. is a heavy charge. Taking 30s. a ton of 2240 pounds as the average of the cotton freight by steamers from Bombay to Liverpool during the year 1882, the charge from the Dhárwár cotton fields to the coast is nearly twice as heavy as the charge from Bombay to Liverpool. The cost of freight by phatemári to Bombay is 3s. 3d. (Rs. 18) and by steamer 8s. (Rs. 4) a khandi of 784 pounds that is for phatemáris a third and for steamers four-fifths of the average 1882 steamer freight from Bombay to Liverpool. When cotton is sent in full-pressed bales, the cost, including the pressing carting and shipping charges, comes to about £2 0s. 6d. (Rs. 201) a khandi of 784 pounds, or

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¹ The details are: Pressing £1; cart hire to Karwar 12s.; freight to Bombay 8s.; Karwar agency 6d.

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about 13.5 per cent of the value of the cotton. If the Dhárwár dealer sends his cotton to Bombay in bundles or dokrás, and it is sold in Bombay at his risk, the cost of bringing it to market comes to about £1 19s. 2d. (Rs. 19₇) the khandi or 13.05 per cent of the value of the cotton.

During the last fifty-five years Government have made repeated efforts to improve the Dharwar cotton trade. In 1812 the Madras Government calculated the export cotton trade of Dharwar and all the adjoining districts, through Kanara to Bombay, at about 1065 bales, probably nags of 300 pounds each. Of these 1065 bundles probably not more than 300 were of Dharwar growth.² Up to 1829 there was no regular trade in Dharwar cotton; a few boles were carried by Lamans or pack-bullock men to the Madras districts for hand loom weaving. Dirt greatly reduced the value of the cotton which found its way by sea to Bombay. Much of this dirt was due to the difficulties of carriage. The cotton was thrown loosely into bags which were carried on bullocks and had to be daily laden and unladen. In crossing streams the cotton was wetted, and, at the daily halt, the pack was rolled into the dust or mud. The damage and loss did not cease when the cotton reached the coast. In the voyage to Bombay it suffered much from salt water, and, till as late as 1810 when the state lapsed to the British, Augria, the chief of Kolaba, stopped all cotton boats as they passed, sent officers to board them, and levied a heavy and vexatious toll on their cargo.3 In 1836 some samples of specially cleaned Dhúrwar cotton were valued in Bombay at £10 16s. (Rs. 108) the 550 pounds, when ordinary Surats were selling in England at £8 to £9 10s. (Rs. 80-95). The enhanced value of this cotton did not meet the charges for its special cleaning. In England the specially cleaned cotton was valued at 81d. a pound and the common dirty cotton at 61d. to 7d. while in Dharwar the specially cleaned cotton cost £7 10s. (Rs. 75) and the common cotton cost £4 (Rs. 40) the khandi of 784 pounds or a difference of 1 thd. the pound. Government did not consider these results promising enough to justily further expenditure on improved methods of cleaning cotton.

From 1842 attempts began to be made to grow American seed cotton. At first from the difficulty of cleaning it and from the want of a market, either in Dhárwár or in Bombay, the native dealers would not touch American seed cotton. Till 1846-47 most of the Dhárwár-American cotton was shipped by Government at their risk. In 1846 native merchants for the first time bought Dhárwár American on their own account. In the same year the Government shipments to England were reported to have left a profit of nearly twenty-three

¹ The details are: Cart hire and tolls to the coast 17s. 6d.; cart broker's fee 3d.; freight to Bombay 3s. 3d.; landing charge 1½d.; wharfage fee 1½d.; veighing charge 1½d.; agent's charge in Bombay 4s. 6d.; agent's charge at the coast 10½d.; buyer's discount at 3½ per cent equals 10s. 6d. when cotton is at £15 (Rs. 150) a khandi; broker's fee in Bombay on sale of the cotton 1s. 6d.; subscription for the Bombay animal home 6d.; subscription for other Bombay charities ¾d. When the cotton is shipped at Kumta a fee of 2¾d. is levied on every khandi of cotton to support the Kumta temples.

² Walton's Dhárwar Cotton, 3.
3 Walton's Dhárwar Cotton, 16.

per cent. Mr. Mercer, one of the American planters, including packing charges, calculated the cost of sending a Bombay khandi of 784 pounds of cotton from Dharwar to Bombay at £1 15s. (Rs. 17½), of which no less than £1 (Rs. 10) was the cost of carriage to the coast. The calculation was exclusive of a duty of 6s. (Rs. 3) the khandi which was imposed at the ports, but was remitted on shipments to England. These charges represented about forty-five per cent on the value of the cotton in Dhárwár, so that, by the time the cotton was on board ship in Bombay for England, of every £10 (Rs. 100) worth of cotton, at least £6 (Rs. 60) represented the carriage from the fields to the ship. In 1847 the Bombay cotton trade was so sick that, at the request of the leading firms, a commission of ten Government officers and merchants was appointed. The members of the commission were Messrs Glass, Spooner, Inversity, Bowman, Crawford, Smith, Murray, Karsetji Jamsetji and Karsetji Kawasji, to whom was afterwards added Mr. now Sir H. B. E. Frere. Commission made many sound and practical proposals. suggestion of most importance to Dhárwár was that roads should be made from the Dhárwár cotton fields to the coast. One practical result of this recommendation was the order that the making of the road from the Dhárwár cotton districts to Kumta should be at once pressed on and that the road should be made fit for carts throughout its whole length. At this time the Dharwar cotton is described as moving along on bullocks at one to two miles an hour. The bullocks were loaded and unloaded twice a day, generally near water where their packs were rolled in the mud. During the march each bullock consoled himself by keeping his nose in his leader's pack, and steadily eating the cotton. The loss in weight, which had not been made good by dust, was too often supplied by water and mud at the journey's end. The want of cheap and easy communication with the coast smothered the trade.

About this time the Bombay Government addressed the Bombay Chamber of Commerce in the hope of inducing them to take an active part in the Dhárwár cotton trade, Government stated that the outturn of American cotton was now so large, that they were unable to buy the whole quantity through their own agents; the Government planters had found it necessary to make contracts through native traders. Government also stated that there was enough American seed to sow 100,000 acres, and that the landholders were willing to sow American cotton to any extent, if only they were sure of a market for their produce. To foster the growth of American cotton Government had hitherto undertaken to buy all American cotton grown at £5 10s. (Rs. 55) a khandi of 784 pounds. Government thought it was time that this cotton buying should pass from them to the Bombay merchants to whom, Government were satisfied, Dhárwár American cotton would prove a profitable investment. reply the Chamber, who expressed much interest in the growth of American cotton, asked that enough of it might be sold in Bombay to determine its value. Sir G. Clerk, then Governor of Bombay, approved of this suggestion and ordered 500 bales to be sold in Bombay on condition that the buyer engaged to ship it to England. In accordance with this arrangement 307 bales of Dharwar American

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to Bombay and large quantities are sent to Madras. Hides are cured at Ambur near Madras before they are offered for sale in the Madras market. In Dhárwár the price of a sheep's hide is 1. 6d. (12 as.), of a goat's hide 1s. 9d. (14 as.), of a bullock's and cow's hide 4s. to 6s. ('Rs. 2-3), and of a buffalo's hide 6s. to 8s. (Rs. 3-4). Horns are sold at £23 to £38 the ton (Rs. 3-5 the man). During the last twenty-five years there has been a great increase in the import of Bombay mill made and European yarn, cotton and woollen cloth, penknives, scissors, needles, thread, kerosine-oil, lamps, wax candles, stationery, watches, clocks, boots and shoes, glassware, matches, and intoxicating drinks.

Crafts.

The chief crafts and industries are the ginning pressing and spinning of cotton, the weaving of cotton and silk goods, the weaving of carpets and printed floor-cloths or jájams, the making of caps, the weaving of blankets, the working in gold, silver, copper, brass, iron, tin, stone, earth, wood, and leather, and the making of molasses, sugar, glass bangles, oil, redpowder, and ink. Three crafts have entirely or almost entirely died out, the making of saltpetre,

GINNING.

One1 of the chief industries of the district is the ginning of cotton, that is the separating cotton wool from cotton seed. practice is greatly neglected, cotton should be dried before it is ginned. If it is not dried the fibre is stained or otherwise harmed.

To dry the cotton it should be spread in the sun and often turned so that every part of it, especially the seed, may be thoroughly dried. Cotton cannot be properly ginned in wet or even in damp weather; a short smart shower unless followed by a steady dry wind will stop cotton ginning for days. Each landholder is careful to put on one side part of his best cotton for home spinning. This is ginned separately with much more care than what is meant for sale. The quantity set apart for home spinning depends on the number of women in the household and the leisure they have for working the spinning machine. For home spinning the staple is so well cleaned that not a single seed can be found in a dozen pounds. Three machines are used for ginning cotton; the ginning wheel or charka, the foot-roller or hattigudda, and the sawgin. Of these machines the ginning wheel and the foot-roller are used for Kumta or local cotton only. Except in outlying parts on the borders of Madras and Maisur the ginning wheel or charka is very little used in Dharwar. It turns out more work than the foot-roller, but does not clean the cotton so well. The foot-roller is a rude primitive machine. Its chief parts are the tevuntigi, that is the threelegged stool on which the ginner sits, worth 6d. (4 as.); the am-kul or flat stone about one foot by six inches and two inches thick worth 3d. (2 as.); the paventigis or the two wooden soles for placing under the feet when turning the roller worth 11d. (1 a.); and the kuda or iron roller about one foot long and tapering from about half an inch in the middle to a point at the ends. The foot-roller is worked only

¹ From Walton's Dharwar Cotton in 1877.

A detailed description of the charla is given in the Belgaum Statistical Account.

by women and children. In using the foot-roller the seed cotton is laid in the sun, frequently turned, and when well dried is sharply beaten with a thin bamboo called shedi that it may be as loose as possible for ginning. When a heap of cotton is ready the ginner sits on her three-legged stool. She sots the stone on the ground before her, and, on the stone, lays the iron roller whose ends stand about three inches beyond the sides of the stone. end of the roller she sets one of the wooden soles. She leans forward still sitting but partly balancing herself on her feet which she rests on the wooden soles at the ends of the roller. She takes a handful of seed cotton in her right hand and pressing with her feet on the wooden soles moves the roller back and forward on the stone. As the roller moves she drops seed cotton under it and the pressure of the roller on the seed cotton separates the wool from the seed. The seed comes out in front and the wool comes out behind. As the wool comes out the ginner keeps pulling it under her stool with her left hand. Ginners are sometimes paid in kind and sometimes in money. When they are paid in money, the day's carnings range from 3d. to 6d. (2-4 as.). The wages are in proportion to the work done. If cotton owners wish the cotton to be free from seed and dirt for local spinning, the ginner is paid by the amount of seed and dirt she takes out; if the cotton is for export, the ginner is paid by the weight of clean cotton. If honestly worked the foot-roller cleans local cotton better than any other machine. It is the only machine that separates the seed without harming the fibre. At the same time the process is very slow. Only forty-eight pounds of seed cotton are ginned in a day. This slowness is a very serious evil as the local cotton cannot be ginned in time to reach Bombay before the rains, and loses much of its value by being kept for months in damp dirty storchouses. So important an element is the ginning in the preparation of the local cotton that when labour is cheap, the area under local cotton rises, and when labour is dear the area under local cotton falls. American cotton can be ginned by the saw-gin only.1 Besides some steam gins, which have lately been started in some of the leading centres of the local cotton trade and of which details are given later on, more than a thousand hand-worked saw gins are scattered over the district. dry weather an eighteen saw-gin in proper order cleans about an hundredweight of seed cotton in an hour. But like the foot-roller, a short sharp shower of rain, unless followed by a steady dry wind often stops saw-ginning for days. Though the saw gin is suited only for American cotton, it is often used to gin the local or Kumta staple; this practice is especially common when the local cotton has been dulled or soiled by rain or has been beaten down on the ground. With the foot-roller it is impossible to make damp and dirty local cotton look well, so the holder passes it through a saw gin, which freshens it and brightons it, and also gives the dealer the chance of passing it as saw-ginned American. Saw gins were brought into India as early as 1828. In 1828 one of two Whitney saw-gins sent by the Court of Directors to

Chapter VI. Crafts. Ginning. Chapter VI. Crafts. Gunno.

the Bombay Government was forwarded to Dharwar for trial. Under skilled European control and care the saw-gins at first seemed to work well. At this time the only cotton grown was the local cotton. and, after considerable experience, Dr. Lush, the superintendent of experiments, came to the conclusion that the failures in working the saw-gins were due not to carelessness but to the fact that the saw-gin is not suited to the local cotton. In 1833 Dr. Lush condemned the American Whitney gins. Much time had been lost by assuming that, because the machine did well in America, it must do well in India; a gin was wanted to do for India what the Whitney gin had done for America. On this the Court of Directors offered a £100 (Rs. 1000) prize for the gin best suited to clean Indian cotton. No satisfactory results followed this offer. The introduction of American seed cotton in 1842 gave a fresh importance to sawgins. The local foot-roller could not separate the New Orleans seed from the fibre. Mr. Shaw, the Collector of Dharwar, was satisfied that American cotton would never be popular until a simple portable gin was introduced. In 1844, with some difficulty, five saw-gins were procured which cleaned 300 to 350 pounds of seed cotton a day. Still the annoyance of carrying their cotton long distances to a gin-house prevented many from growing American cotton. On Mr. Shaw's application Government allowed small gin houses to be started in different places; and on the request of Mr. Mercer the American planter, twenty-four charkás or ginning-wheels were brought from Broach. In the same year a proposal was made to make saw-gins in Dharwar with materials to be supplied by the Court of Directors. This was the origin of the cotton factory which was established at Kusvugal. Accordingly, in 1845, an indent was sent for 1000 saws, 1200 graters, and 1025 zinc washers. In 1845 twelve saw-gins were at work, of which seven were in the hands of private persons and five were in the hands of Government. The demand was still in excess of the supply; if twenty more saw-gins were available all would be busy. In June 1845 Mr. T. W. Channing, one of the American planters of Kusyugal, expressed the opinion that if a saw-gin could be made cheap enough for the ordinary landholder it would come into general use. In the same letter he obtained leave to make two twenty-five saw-gins at an estimated cost of £19 16s. (Rs. 198). The actual cost proved as low as £14 14s. (Rs. 147), a notable saving from £35 (Rs. 350) the ruling price of an American gin of the same capacity. In October 1846, Captain, afterwards Sir G., Wingate, then superintendent of the revenue survey, had a trial between the new gin and an American gin of the same capacity, and found that the new gin beat the American by twenty-five per cent. Mr. Mercer wrote to Government that as the demand for gins would increase with the spread of American cotton he would require the help of a good European mechanic to make and repair gins. Instead of sending a mechanic the Court of Directors sent 500 saws as the other parts of the gins could be made in India. In 1846 Mr. Channing recommended that Sheffield saws should alone be used as they lasted much longer than American saws. At this time local cotton as well as American was saw-ginned. Mr. Channing calculated that the cost of roll-ginning 500 pounds of local seed cotton was 2s. (Re. 1), while a good twenty saw-gin would gin 840

pounds in a day at a cost of 2s. 3d. (Rs. 11) including oil and repairs to belts. At these rates after paying all repairing charges the owner would save £9 4s. 111d. (Rs. 9218) each season, the saw-gin would pay for itself in two seasons, and would remain in good order if proper care was taken of it. He noticed that the cotton-growers of Hulgur in Bankapur had clubbed together to buy a saw-gin. Mr. Shaw, who had returned to Dharwar as Collector, wrote to the Revenue Commissioner, recommending that the gins in the district should be transferred to private owners and that one hundred more gins should be made. He had applications from Gadag dealers to buy twelve of the Government gins at £17 (Rs. 170) a gin. Government approved, and in 1847 the Court of Directors made arrangement for sending 5000 Sheffield saws. At this time in Bengal a £50 (Rs. 500) prize was awarded to a Mr. Mather's gin. This machine was tried in Dharwar, but, though it cost as much as £19 6s. (Rs. 193), it was found not nearly so effective as Mr. Frost's Dhárwár factory gin which cost £1 10s. (Rs. 15). In September 1847 the Court of Directors wrote to the Bombay Government, that, in consequence of the Manchester spinners' and weavers' approval of the saw-ginned Dharwar cotton, they were sending saws enough to make 200 saw-gins of twenty-five saws each. In 1848, the Court of Directors sent 2600 saws to Dhárwár, and all the machinery of the cotton factory was removed from Kusvugal to Dhárwár. In 1849 twenty-nine saw-gins belonged to Government, five belonged to private persons, and about thirty were being made at the Government factory. By the end of 1849 many of the Government gins had been passed to private persons, sixty-two gins were worked by private persons, and only eight by Government. By this time many of the early gins had become useless, and they were being rapidly replaced by new gins made at the Dharwar factory. It was believed that what the Dharwar cotton dealers wanted was an effective, small, and cheap gin, and both in England and in India efforts were made to construct such a machine. On the model of a large gin made by Mr. Frost the engineer of the Dharwar factory, which had been lent to the Manchester Commercial Association by the East India Company, a small machine was made which is known as the Manchester cottage gin. Several of these cottage gins of different designs were subjected to a public trial, at which the East India Company was represented by Dr. Forbes Royle. The Court of Directors ordered 200 gins of the pattern that Dr. Forbes Royle had approved, and a small consignment of them arrived in Bombay in 1849. Seven of these were sent to Dharwar. They were not very successful when worked in villages, and Mr. Frost improved on the plan by making a number of seven saw-gins, which he sold at £4 (Rs. 40) a gin. At this time the factory issued gins each of seven to twenty-five saws worth £4 to £22 10s. (Rs. 40 - 225). Complaints in England that cotton was being cut by the saw-gin raised a discussion as to the rate at which a saw-gin should be driven. Mr. Channing, one of the planters who had considerable experience in the Bombay Karnatak, held that a gin drivon at 180 to 190 steady revolutions the minute, would separate the fibre from the seed with as little injury as if it had been done carefully by hand, but that if the speed were either increased or lessoned, the cotton would be injured

Chapter VI-Crafts. Ginning. Chapter VI. Crafts. Ginning. as its steady roll would be disturbed. Shortly before this, at Egyptian cotton ginning wheel or charks had been sent by Government to Dharwar; it was set up at the Dharwar factory, and tried by Messra. Blount and Frost of the cotton department. Both these officers reported that the Egyptian wheel did not possess a single advantage over the Indian wheel gin and was inferior to it in several respects, the cost was eight times as great, it wanted a strong trained man to work while the native wheel was worked by a woman, and it was fixed while the native wheel was movable. With all these disadvantages the Egyptian wheel did not turn out more work than the Dharwar wheel. In 1850 the total sale of gins from the Dharwar factory had reached 144 of which thirty-six had been bought for the neighbouring districts. In 1852-53, 184 saw-gins were at work, and by the end of 1854 the number had risen to 298. In 1854 Mr. Brice, of Messrs. Brico and Company, proposed to take over the Dharwar factory. In 1855 Mr. Frost resigned, and in May of the same year Dr. Forbes the civil surgeon of Dharwar for a time took charge of the factory. Many farmers and dealers complained to the new superintendent that they had been supplied with bad gins and had no means of repairing them. Dr. Forbes considered these complaints well founded. On his recommendation Government determined to withdraw all defective machinery and replace it with good saw-gins, on terms more favourable to the landholders and dealers. Much damage bad been done to the gins by careless handling. The gins had been taken from place to place by labourers who were entirely paid by the amount of cotton they turned out, and the labourers were not long in finding that a gin whose parts were loose and whose saws were worn passed more cotton than a gin in good repair. The existing gins were too delicate for the rough handling they had received. Dr. Forbes tried to inventa simple lasting and strong machine. Even his gins were not strong enough; but some made in England in iron frames In 1855-56 fifty gins were issued from the answered better. Government factory, some of which were sent to take the place of the condemned gins. Mr. Brice also bought some cotton gins from the Government factory and again made an offer to take up the whole establishment; but Government preferred to keep the factory in their own hands. It was determined that Dr. Forbes should continue to manage the experiments, which now consisted almost solely of providing and repairing machinery. In 1856-57, 123 saw-gins were issued from the Government factory. By this time Messrs. Brice and Company had started cotton agencies at Bankapur, Gadag, Narigal. Navalgund, Ranebennur, and Ron, where they had employed a large number of people in foot-rolling, as their gin houses were not ready. This season Dr. Forbes tried his new ten saw-gins and found them work steadily without damaging the staple. He also made twenty-six wheels or charkás for ginning local cotton. but they required too much skill and care and never came into use. Dr. Forbes wished to engage twenty-five boys chosen from the families of village carpenters and blacksmiths and train them to be skilled workmen. Many of the village workmen did not know the use of a screw-nail or a bolt and always injured and often ruined a gin when they tried to repair it. Government held that so long as

mechanics freely offered their services for employment Dr. Forbes' scheme of training apprentices was unnecessary. In 1857-58, 130 gins were issued, of which seventeen were sent to replace condemned gins. This replacing of old gins by new gins was managed without loss to Government, as it was found that the prices charged for the new gins covered all expenses. By this time gius were scattered all over the district, and it was found very difficult to repair gins fifty to ninety miles from the factory. If a gin was damaged it could be repaired only at the factory, and the owner had to move his gin to the factory at a great cost of money and time. At Dr. Forbes' suggestion a branch factory for repairing gins was established at Karajgi a sub-divisional town about fifty miles south-cast of Dharwar, under Mr. Courpalais, who had been trained as an apprentice by Messrs. Blount and Frost. The factory then employed ninety hands at a monthly cost of £120 (Rs. 1200), and it had become a school for carpenters, smiths, wood and metal turners, and general outlitters. At the end of 1859 the Bombay Government sent Dr. Forbes to England, with the models he had prepared to arrange for the construction of 600 cast-iron gins. In 1859-60, fifty-six new gins were issued from the factory; and about 600 were at work, of which one-half were improved gins and the other half required constant repairs. Dr. Forbes' own gins had been at work for a long time and required frequent inspection. The owners went on working a gin after something had gone wrong until either the gin was broken or the cotton ruined. system of paying the labourers by the outturn, irrespective of quality, was more general than ever. The labourers had to turn out a certain weight of cotton for a day's work, and, as soon as this was performed, the day's labour was over and they were free to work for other employers. The ginners had come to know that by removing screws and loosening bolts they could let seed and dirt run through and thus increase the weight of cotton. In consequence of the injury that was being done to the good name of Dharwar-American cotton, Dr. Forbes persuaded the people of Karajgi and Gadag to subscribo 12s. (Rs. 6) a gin and he undertook with the proceeds to keep their gins in repair. In 1860 Dr. Forbes showed a machine for ginning local cotton to a committee of the Bombay Chamber of Commerce. It was made on the principles of the Gujarat wheel gin or charka,, was worked by a boy, and ginned 430 pounds of seed cotton in twelve hours. At the same time Dr. Forbes produced a large machine which was called the power-gin wheel or charka. It was worked by two men and a boy who fed it with cotton, and it ginned 1000 pounds of seed cotton in a day. Neither of theso machines came into use as Dr. Forbes thought the machinery too delicate to stand the rough work to which they would be exposed. In 1860-61, forty-two gins were issued, raising the total issue of gins from the Dhárwár factory to 884. Some enterprising workmen who had been trained in the factory had to make and sell gins, and, by the end of 1862, the number of gins at work in the district had risen to 1000. The issue of the private gins was a mistake as they were so ill-made that they did more harm to the cotton than the gins formerly condemned by Dr. Forbes. In 1863, 282 gins and in 1864 181 gins were issued from the factory. At the factory

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the highest price charged for the largest gin was £40 (Rs. 400); but the demand was so great and money was so plentiful that after leaving the factory many gins were bought for £80 (Rs. 800) and some for as much as £100 or £120 (Rs. 1000-Rs. 1200). The demand was so great that many useless gins were sold by private workmen. In 1865, in succession to Major Hassard, Mr. W. Walton was transferred from the forest department to the charge of the factory. The sale of saw-gins for the year was 110. Mr. Walton found the Karajgi and Gadag branches in a bad state. committees were largely accused of managing them rather in the interests of themselves and their friends than in those of the general body of subscribers. Many of the workmen had left the factories and gone to work on buildings that were being raised by cotton growers and cotton dealers who had grown rich during the American war. The travelling workmen did not repair the gins, but took to other work; and when called on to produce certificates produced It was impossible to punish them as village false certificates. officers and other influential persons were implicated, and they could not be dismissed as there were no other workmen to take their place. In 1805-66 twenty-nine gins were issued. Like Dr. Forber Mr. Walton when on tour held meetings of gin-owners and proposed to them to build two more branches one at Bankapur and one at Ranebennur, both important cotton trading towns. In 1868-69 a repairing branch was started at Hubli, where up to this time a clever workman had worked a shop at which he repaired gius. season 200 gins were repaired. In March 1868 the two new repairing factories began to work. The demand for the use of the factories was greater than could be met, not only on account of the limited number of skilled workmen, but also on account of deficient funds. The gin-owners refused to subscribe a sufficient sum for adequate supervision, and Government were unwilling to bear the expense. During this season a cattle-power machine designed to drive one to four saw-gins of eighteen saws each, was issued from the Dharwar factory to an influential farmer at Haliyal six miles from Hubli. The machine was driven by three pairs of bullocks, working two gins of eighteen saws each. It was the result of many years' study on the part of Dr. Forbes and other superintendents of the factory and was constructed in England. In the 1868-69 Breach exhibition, this machine and a treadle or charka were shown. Both these machines were highly spoken of, but never came into general use in Dhárwar. In 1870-71 during Mr. Walton's absence in England the factory was entrusted to Mr. E. Jones. Mr. Jones devoted his Ctime to the construction of a new rolling gin and the regular work ebf the central and branch factories fell into disorder. hsucceeded by Mr. Livingston, who had experience of cotton-ginning factories in Gujarat. In 1871-72 Government appointed a committee to consider whether they could withdraw from all connection with the Dharwar factory. While these inquiries were being made Messrs. W. Nicol & Co., of Bombay, engaged to maintain the gin repairing establishments at Bankápur, Gadag, Hubli, Karajgi, Navalgund, Ranobennur, and Ron, doing away with subscriptions and charging for repairs. Government declined this offer and asked the Revenue Commissioner to suggest how the factories could be best disposed

of. Mr. Havelock the Commissioner was unwilling that the factories should be closed. He thought them an excellent school for training workmen. Mr. Robertson the Collector thought that Government was almost bound to provide means for repairing gins. The gins had been bought and the growth of American cotton had spread to a great extent on the understanding that Government would enable the people to keep the gins in order. After inquiry Government agreed to continue the central factory provided the cost did not exceed £1000 (Rs. 10,000) a year; all branch factories which did not pay were to be closed.

In 1872 Mr W. Bowden was sent by the Secretary of State to conduct experiments to decide which was the best machine for ginning freshly picked Dhárwár-American cotton. The makers of roller gins in England were in favour of roller gins and Dr. Forbes was in favour of saw-gins. Trials were made at Dhárwár both with hand and with cattle power. These trials established one point that the only machine that successfully and economically ginned Dharwar-American cotton was the saw-gin. Mr. Jones started a small steam-ginning factory with ten of his roller gins at Navalgund. The factory did little work and Mr. Jones shortly afterwards sold the machinery to the Karwar Company a cotton trading joint stock association. Messrs. Robertson and Brothers worked ten roller gins also by steam in Gadag. was supposed that machine-ginned local cotton would fetch a sufficiently higher price than foot-rolled local cotton, to cover the expenses of the machinery; but it was found that good foot-rolled local cotton fetched higher prices than machine-ginned local cotton. In 1873, on the suggestion of the Collector Mr. E. P. Robertson, a school of industry for training boys in carpenter's smith's and fitter's work was established in connection with the factory. In May 1875 the central factory was closed as a separate institution and incorporated with the school of industry and in September 1883 the school was closed on account of its expense. In 1873-74 Mr. Jones sold his steam ginning factory to the Kárwár Company who removed it to The Kárwár Company tried to work the gins with local cotton, but failed, the manager thought from the want of European supervision. With the object of supplying the trained workmen of Dharwar with materials required for repairing gins, an auction sale was held at the Dharwar factory on the 5th of June 1874. No buyers attended. In 1874 the Kárwár Company started a steam-ginning factory at Hubli, but in the same year gave up the idea of cleaning local cotton with steam gins. In 1877 the Karwar Company started another steam-ginning factory at Gadag. The Hubli steam factory was worked by a ten-horse power engine with ten gins of forty saws each, and the Gadag steam factory was worked by a twenty-horse power engine with twenty gins of forty saws each. Since 1881 when the Karwar Company failed, the steam factories owned by the Kárwár Company at Hubli and Gadag have been worked by Messrs. Framji and Company. In 1882 the whole of the old sawgins in these steam factories were replaced by twenty-six double roller Platts' Macarthy gins, eight being at Hubli and eighteen at Gadag. With these new gins the steam factories at present (1884) gin local or Kumta cotton. At present (1884) the branch factories Chapter VI. Crafts. GIMNING. Chapter VI. Crafts. are supported entirely by the subscriptions paid by gin-owners, the receipts for work done and the balance of the former Cotton Frauds Funds.

PRESSING.

The first attempt to press cotton was made about 1836 when the Bombay Government established screw presses at Dharwar, Gadag, and Navalgund. In 1848 Mr. Blount one of the American planters renewed the attempt to start a cotton press; but his attempt also seems to have failed. In 1855 Messrs. Brice and Company bought some presses from the Government factory and worked them in the This attempt like the two previous ones proved a failure. The cause of these repeated failures was the want of confidence in the ginners and dealers. So long as the cotton was in a loose bundle it was easy for the exporter or the exporter's agent to open and test a bundle but with pressed bales there was no security. Even in 1861-65 no sort of pressing was in general use till Mr. Walton made a vigorous effort to introduce half-pressing. In 1873-74 Messrs. P. Chrystal and Co. started the first full-press in the district at Gadag. The press was worked by a steam engine and during that season pressed and packed 3400 bales chiefly of American cotton. In the same year the Karwar Company started a steam press at Hubli. Since 1876-77 four steam full-presses have been at work, two at Gadag and two at Hubli. At present (1881) four steam presses are at work, two at Hubli and two at Gadag, and two hand or half presses, one at Hubli and one at Gadag. Of these the two steam presses at Hubli and one of the two at Gadag, each of twenty horse power, are owned by Messrs. Framji and Company and the other steam press at Gadag of twenty-five horse power, is owned by the West Patent Press Company. The two hand presses belong to Messrs. Robertson Brothers and Company. Besides the engineer, engine-driver, fireman, fitter, and blacksmith, a steam press, when at work employs about sixteen men and sixteen women labourers. mostly Maráthús and Musalmáns. Men are paid 41d. to 6d. (3-4 as.) a day and women 3d. (2 as.). April and May are the busiest months for pressing. During the three years ending 1883, of the three presses owned by Mosses. Framji and Company the Gadag factory pressed about 3000 bales and the two Hubli presses about 1000 bales a year, almost all of local or Kumia cotton. The other Gadag press owned by the West Patent Press Company did no work during the four years ending 1883; in 1884 it pressed some saw-ginned Dhárwár. The full-pressed bales chiefly go by Karwar to Bombay.

Spinning.

In a Hindu house there is next to no sewing. Almost all clothes are worn as they come from the loom, so that when there is no field work, after their house work is over, the women have a good deal of spare time. As a class the women are hardworking and spend all their spare time in spinning. Most women spin five hours a day, and others whose house work is light, spin still longer. For hand spinning local or Kumta cotton is alone used. Cotton to be used for local spinning is cleaned with very much greater care than cotton to be packed for export. In ginning for home spinning almost no seed dirt or leaf is left. This clean cotton is given to Pinjáris who thoroughly loosen and divide it, and make it into little rolls or hanjis of the size of the finger. These hanjis are spun by the spinning wheel called nulurati which costs about 4s. 6d. (Rs. 24). The thread

thus spun is rolled into small oblong reels or kukdis by the aid of the same spinning wheel. The yarn of these reels is then spread on a wooden frame or hasmari which is fitted with pegs and costs 1s. 6d. (12 as.). The threads when thus arranged are called putis or hanks of yarns. These putis are brought to market and sold to weavers, carpet-makers, and rope-spinners. In September 1883 a beginning was made of spinning cotton by steam power at Hubli. In September 1881 a spinning mill called the Southern Marátha Spinning and Weaving Company Limited was registered in Bombay. It is a company with limited liability and has a capital of £60,000 (Rs. 6,00,000) divided into 2400 shares of £25 (Rs. 250) each. managers and secretaries of this company are Messrs. P. Chrystal and Company of Bombay and Hubli. On the 1st of September 1882 the foundation stone was laid at Hubli, and in spite of the great difficulty of carrying the heavy machinery from Karwar to Hubli by the Arbail pass, a one-storeyed building covering 4000 square yards and capable of holding 10,000 spindles, besides the engine and boiler house, was finished and machinery fitted by the 2nd of The machinery is made September 1883 when work was begun. by Messrs. Platt Brothers and Company Limited, Oldham. It is worked by a compound engine of 400 horse power, driving a flywheel twenty-four feet in diameter and making fifty revolutions a minute. In March 1884 4700 spindles were at work yielding a daily outturn of about 1300 pounds of yarn. Local or Kumta cotton was found better suited for spinning than saw-ginned American. March 1884, besides spinners jobbers and fitters, the factory employed 250 hands; the men were paid 6d. to 1s. (4-8 as.) a day, the women 41d. (3 as.), and the children 3d. to 41d. (2-3 as.). The only Europeans on the staff are the manager and the engineer. The factory promises well. Cotton grows abundantly at the door and the yarn has a large domand in the neighbouring towns of Belgaum, Hubli, Gadag, Ranebennur, and other weaving centres. March 1884, of the 2400 nominal shares, 1210 equal to a capital of £30,250 (Rs. 3,02,500) have been taken, 396 in the district, 110 in England, and 704 in Bombay and its neighbourhood.

Chiefly in the towns of Annigeri, Betigeri, Dambal, Gadag-Betigeri, Garag, Hubli, Lakundi, Nadgund, and Navalgund, both cloth of gold and silver and plain or silk-bordered cotton cloth are woven by a large number of Lingayat, Hatkar or Devang, Patvegar, Sali, and Momin Musalman weavers. Of about 2400 cotton and silk weavers, about 1250 are Musalmáns, 500 Patvegárs, 300 Devangs, 200 Sális, 150 Lingáyats, and twenty-five Native Christians. Thomaterials used in weaving this silk-cotton cloth are chiefly thread, silk, and gold or silver lace. to about 1872 thread spun locally by women of the labouring and cultivating classes, especially by Holern or Mhar women which was the finest and best, was largely used by the weavers. Part of this home-spun yarn was used uncoloured in weaving waistcloths and other coarse dangri cloths; part was coloured and used in making women's robes or sadis, bodices or kubsas, and headscarves or rumals. The dyers of cloth and yarn are Linguyats, Namdev Shimpis, and Musalmans, and the chief colours dyed are black, blue, pink, scarlet, Since 1872 Bombay machine-span yarn, which is better finer and cheaper, has to a great extent driven the home-spun

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SILK AND COTTON GOODS. Chapter VI.

SILK AND COTTON GOODS.

yarn out of the market. Cloth-dealers and rich moneylenders bring the machine-spun yarn from Bombay by Kumta and Kárwár. machine-spun yarn is chiefly used in weaving fine waistcloths and women's robes, bodicecloths, and headscarves. Almost all cloths valued at more than 10s. (Rs. 5) each are made of machine-spun thread. As the hand-made yarn sells dearer than the machine-spun yarn and also requires more labour in weaving, the cost of weaving cloth out of hand-made yarn is about twenty-five per cent higher Though dearer than of weaving cloth out of machine-spun yarn. and coarser than machine-spun yarn, the home-spun yarn is much stronger and much more able to stand hard work. Of the yarn used in local weaving about one-third is still home-spun. The home-spun yarn is chiefly used in weaving coarse waistcloths and women's robes, coarse longcloth called dangri jot or khádi, and carpets, floorcloths or jájams, and tent or booth-cloths called gudárs (K.) or páls (M.). Of the other raw materials the coloured silk and the gold and silver lace come from Bombay, and the uncoloured silk partly from Bombay and partly from Maisur. The weavers are partly capitalists and partly labourers employed by the capitalists either by the day or by the piece. Handloom weaving is briskest during the marriage and fair-holding months, especially from January to May. The women of weavers who have capital help the men, and the women of labouring weavers work for hire, in arranging and sizing the warp and in filling the shuttles. A cotton weaver on an average earns not less than $4\frac{1}{2}d$, to 6d. (3-4 as.) a day. clothes woven in the Dharwar looms are dhotars or men's waistcloths about five yards long and one yard broad.. They vary in price from 1s. 3d. to 1s. 6d. (10-12 as.) when made of coarse village yarn, and from 2s. to £1 (Rs. 1-10) when made of fine machine-made twist with silk borders and costly colours. Punjis or boys' waistcloths, about 11 to two yards long and three-quarters to one yard broad, are generally made of coarse village yarn and vary in price from 41d. to 9d. (3-6 as.). Sádis or women's robes, about 71 yards long and one yard broad, vary in price from 3s. to 8s. (Rs. $1\frac{1}{2}$ -4) when made of coarse village yarn, and from 8s. to £2 10s. (Rs. 4-25) when made of English or Bombay mill yarn with silk borders. Kirgis or girls' robes, about 31 to five yards long and two to 21 feet broad, vary in price from 1s. 3d. to 2s. 3d. (Rs. $\frac{1}{5}$ - $\frac{1}{5}$) when made of coarse village yarn, and from 3s. to 16s. (Rs. 1½-8) when made of English. and Bombay mill made yarn with silk borders. Kubsás or bodicecloths about three-quarters of a yard long and half a yard broad, vary in price from 3d, to 41d. (2-3 as.) when made of village coarse varn. and from 6d. to 2s. 9d. (Rs. $\frac{1}{4}$ - $1\frac{3}{8}$) when made of English and Bombay mill yarn. Both mundars or turbans, 71 to fifty yards long and sixteen to twenty inches broad, and shellas or men's sholder cloths 21 yards long and 1½ broad, vary in price from 2s. to £7 10s. (Rs. 1. 75). By adding gold or silver tinsel borders, turbans and shouldercloths fetch a still higher price. Vastas or handkerchiefs, fifteen inches to one yard square, vary in price from 2½d. to 9d. (1½-6 as.) when made of coarse village yarn, and from 1s. 3d. to 2s. (Rs. §-1) when made of English or Bombay mill yarn. In a few towns, especially in Hebsur and in Kerásur and its neighbourhood, tents or booth cloths called pals are made. They are first woven in strips of coarse

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strong cotton cloth of various lengths, and ten to sixteen inches wide. These lengths are then sewn together, until they form the páls or booth cloths which are twelve to thirty feet long and eight to twenty-five feet broad, and sometimes even larger. They are used as carpets, as cloths for sorting grain or for carrying grain in carts from the fields, for rude tents and booths at fairs or jatras, and for market stalls. They range in price, according to size and quality, from 14s. to £2 (Rs. 7-20). Cotton and silk cloth are sold by the weavers either to the local cloth-dealers or to the people on market days. Cloth is bought either direct from the weavers or through brokers or daláls who are paid by the weavers $\frac{2}{3}d$. to $\frac{2}{3}d$. $(\frac{1}{4}-\frac{1}{2}a)$ on every rupes of cloth sold. Most of the cloth is used locally. It is also exported to North and South Kánara and Belgaum and Sháhápur; from Belgaum and Shahapur it goes to the coast for sale. Especially from Gadag-Betigeri it is also sent to Sholapur, Pandharpur, Mudhol, Jamkhandi, Jath, and Sangli. Between 1862 and 1865, when cotton and grain were both unusually dear, in spite of the good demand for cloth, the weavers suffered. The fall in the price of grain and of cotton between 1866 and 1872 helped the weavers, and since 1872 cheap Bombay yarn has enabled them to hold their own against imported cloth. The weavers suffered grievously in the 1876 famine. The price of grain ruined them and the sale of cloth was at a stand; most of them passed out of the famine heavily laden with debt. Since 1876 the brisk local demand for cloth, the fall in price of Bombay yarn, and the local cheapness of grain have so greatly helped the hand-loom weavers that many of them have freed themselves from their famine debt and are fairly off. The opening of the new railways will help the weavers by cheapening Bombay yarn. But it will also increase the competition of outside goods, and, by raising the local price of

cloth; he can no longer live on the margin of profit which used to be enough for his support. The rise in the price of local grain which they cause by opening fresh markets to local field produce seems the chief reason why railways work the ruin of local industries. At the same time, as the bulk of the people are grain growers not craftsmen, the gain from the rise of grain prices is probably greater than

the loss from the decay of local industries.

grain, will make living dearer to the hand-loom weavers and so prevent them producing their cloth as cheaply as before. The opening of railways will also probably be followed by the establishment of local spinning and weaving mills, and, in the end, even more than at present, hand-made products will be ousted by steam-made. The 1 From its much greater bulkiness compared with its value the road-carriage of yarn is much costlier than the road-carriage of cloth. In spite of this disadvantage in rich cotton and grain growing tracts like the Bombay Karnatak, which long road distances separate from railways and from boats, cloth woven locally from imported yarn has of late years held its own with imported cloth. Railways, the great cheapeners of the carnage of bulky articles, should remove or should greatly lessen the disadvantage which long road carriage inflicts on imported yarn in competing with imported cloth. The opening of railways should therefore increase in Dharwar after the railways are opened. But judging by their effect in other districts, instead of fostering local handloom weaving, railways will reduce or destroy the industry. One of the reasons, why, in spite of the gain from the special cheapening of imported yarn, railways smother handloom weaving seems to be the marked increase in the price of grain, and therefore in the cost of living, which follows the opening by railways of new markets for bulky local field produce. The cost of feeding his family rises so greatly, that, in spite of the gain in the relatively greater cheapening of imported yarn, the handloom weaver fails to maintain his competition with imported cloth; he can no longer live on the margin of profit which used to be enough for in rich cotton and grain growing tracts like the Bombay Karnatak, which long road

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CARPETS.

silk weavers suffered specially severely during the 1876 famine as there was a great scarcity of silk as well as of grain.

Besides by the prisoners in Dhárwár jail cotton carpets are woven by sixteen Musalman families, of whom eight live at Navalgund. seven at Hubli, and one at Dhárwár. Of the raw materials used the patte or thick hand-spun yarn is bought locally. The women of the carpet-weaving families twist a large quantity of yarn into strong and long warp threads, either by hand or by the simple spinning and twisting wheel. They then arrange and size these, twisted threads till they are about one hundred feet long, and roll them round a roller which is fixed in the loom. Some of the yarn is dyed red, black, blue, green, and yellow, and occasionally green and yellow yarn is brought from Bombay and used untwisted for the woof. The carpet weaver's women fill a large number of shuttles with red and black yarn and roll the other coloured yarns into several small bundles. Two carpet looms are in use. One is fixed upright from the roof of the house to a pit, about three feet below ground; the other is laid level with the ground from end to end of the weaving room. In the upright loom a carpet of any length and of any breadth can be woven. Any number of weavers, according to the breadth of the carpet, can sit in a row on each side of the loom, face to face, separated by the upright warp. No weaving or loom comb is laid across the web and no warp threads are passed between the teeth of the comb as in cloth weaving. When carpets of six feet broad or less are to be woven they are woven within doors. If a carpet is nine to twenty feet broad; the loom is set upright in an open space under a tree; a trench is dug about three feet deep and three feet broad, and as many feet long as the carpet is to be broad. The top of the loom is tied to a strong branch of the tree and the bottom is fixed in the trench. Several weavers both men and women sit in a row on each side of the warp, face to face, with their feet in the The woof is passed from end to end of the warp not in shuttles, but by the weavers' hands who sit in a row on each side of the warp. By means of a rough mechanism fixed in the trench and worked by the weaver's feet, each time the woof threads are crossed between the warp threads, alternate warp threads are moved forwards and backwards. Instead of the comb frame used in the ordinary loom to drive the woof fibre home, each weaver on either side of the vertical carpet warp threads holds an iron instrument one end of which has blunt saw-like teeth, and with the teeth drives the woof threads into their place. The teeth of the instrument, which serve the purpose of the comb teeth, fix the woof between alternate warp threads. When flowers or other figures are to be woven, each weaver passes the bundles of the woof threads of different colours, between the required number of warp threads, instead of from one end to the other of the carpet, and weaves the required flower or figure. When two or three feet of the carpet are woven the completed part is rolled round a roller in the trench, and the roller with the warp at the top of the loom is loosened a little, and a fresh portion of the warp drawn down and woven. This process is repeated until the required length of carpet is finished. The carpet is then cut from the loom and the weavers begin a new carpet out of the remaining warp threads in

the loom. A carpet thirty-two feet long by ten feet broad costs £12 to £15 (Rs. 120-150), according to the thickness of the texture and the fineness of the workmanship. At the level carpet loom the man weaves a carpet six or seven feet long and four or five broad. The level loom is almost the same as a cloth loom, The weaver does not use any small toothed instrument to drive and fix the woof into the warp threads as in the upright loom. He drives home the woof thread with the regular weaving comb. Instead of the reeds of the cloth comb the teeth of the carpet comb are formed of a close row of iron plates, which are kept in their place by a strong heavy wooden frame. The weaver also uses the shuttle filled with red or black untwisted yarn and with it passes the woof yarn between the warp threads as if weaving in a cloth loom, and, as in cloth weaving, drives the woof thread into its place by pulling towards him the weaving comb. This is done when the carpet to be made is of one or two inch broad red and black stripes. When flowers or figures are to be woven, the weaver passes the woof yarn of all colours by his hand and then pulls the weaving comb towards him to fix the woof thread in its place in the warp.

The jájam or floorcloth, an inferior carpet, is adorned with figures of flowers, horses, and elephants. These figures are printed, not woven. Uncoloured common cloth woven with thick yarn to make labourers' and husbandmens' coverlets, jackets, and trousers is bought and cut or sewn together to the required length and breadth. A piece of strong white cloth ten feet by five costs about 4s. (Rs. 2). The cloth is steeped for a night in a solution of sheep's dung, it is washed, and for a second night is soaked in oil and earth salt or fuller's earth. The cloth is washed three or four times, but not so thoroughly as to remove the whole of the oil, and is soaked in a strong solution of myrobalans and water, and dried. The printers have two sets of wooden blocks each about four inches square. One block is carved with the outlines of the creepers, flowers, horses, and elephants, to be printed on the cloth. These outlines stand beyond the plane of the block, so that they may touch the cloth when printing; while the rest of the surface of the block is depressed, so that it does not touch the cloth. In the second block the parts corresponding to the outstanding lines in the first stamp are depressed and do not touch the cloth, while the parts corresponding to the lowered parts in the first stamp, are raised so as to touch the cloth. After the cloth has been steeped in a solution of myrobalans and water the printer dips the first block in a solution of iron rust and water, and stamps the cloth with the outlines of the figures in black. He then dips the second block in a solution of alum and water, and stamps the same parts of the same cloth. The cloth is then boiled in water with some alkali. The parts of the cloth which have been stamped with the iron rust and water remain black, those stamped with the alum and water turn red, and the untouched spaces left by the second stamp become white, when boiling has removed the solution of myrobalans. After the cloth is washed in plain water and dried, Chapter VI. Crafts. Carpets.

FLOORCLOTHS.

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Floorcloths.

it is ready for sale, being ornamented with black and white figures on a red ground. To print a cloth ten feet by five costs 4s. (Rs. 2). Another piece of cloth of the same nature and size either dyed in indigo or undyed is laid below the printed piece, and the two are sewn together. The jájam is then ready for use. The undyed undercloth costs 4s. (Rs. 2); if dyed in indigo it costs 1s. (8 as.) more. Thus a floorcloth ten feet by five costs 12s. to 13s. (Rs. 6 - 6½). Floorcloths are made to order in Hubli and Karajgi by three or four families of Jingars or painters, who claim to be Kshatris. Large numbers of floorcloths printed in Belgaum and other districts are also brought for sale on market days. When not stamping floorcloths, the Jingars or painters make and paint toys, cradles, and other wood work, and draw pictures. Floorcloths last only two or three years, while good carpets last twenty-five to thirty years.

HATS.

Excellent boys' hats in the shape of Brahman and Maratha turbans are made at Hubli by fifteen families of Jingars and are sold at 2s. to 10s. (Rs. 1-5) each. In making these hats tamarind seeds are soaked in water. Their upper coloured husk is removed and the inner pithy parts are ground into a paste and boiled. The paste is rubbed on several pieces of cloth spread one over the other, according to the required size and shape of the cap and dried. When it is dry the upper part is covered with different coloured velvet and sewn together with silk. The hat is then ornamented with flowers of real or false lace, and the whole is made to look like a Brahman or a Maratha turban. The inside is stuffed with cotton and lined with printed or silk cloth.

BLANKETS.

White, black, or white and black striped blankets are woven by shepherds. Of 87,708 shepherds shown in the 1881 census about one-tenth or 8700 are blanket weavers. In the Ránebennur sub-division in the south-east large blankets, about sixteen feet by six are woven; the blankets woven in the rest of the district are not larger than nine feet long and four broad for men and 71 feet long and three broad for children. Generally the women spin the wool into thread, arrange and size the warp, and fill the shuttles; and the men weave. In Dharwar, wool is not sold by the ordinary Either the shearing of 100 sheep is bought in sher weight, a lump for about £4 (Rs. 40), or the wool is bought by the chitti or four sher millet measure which costs about 16s. (Rs. 8) that is at the rate of 14d the pound. One chitti or fourteen pounds of wool works into four blankets, each nine feet long by four feet broad. Of these four blankets two are black together worth 16s. (Rs. 8) and two are white together worth 8s. (Rs. 4). To spin the wool and weave these four blankets take a man and a woman about forty days, that is after deducting 16s. (Rs. 8) as the cost of one chitti of wool, the men and women earn 8s. (Rs. 4) in forty days, or 6s. (Rs. 3) a month. At the rate of three blankets a month for each couple the 8700 blanket weavers, during the eight fair months, yield an estimated outturn of 104,400 blankets worth £31,320 (Rs. 3,13,200). This outturn is not enough to meet the local demand. Blankets are largely imported from Belari and Maisur, part of the imports being used locally and part being sent to the coast. Blanket

weavers generally sell their produce direct to the wearers on market days in local market towns. When not sold in the markets, blankets are sold to local blanket dealers who are generally rich shepherds and are sometimes Lingáyat cloth-dealers. As white and white and black striped blankets fetch 4s. (Rs. 2) each and black blankets fetch 8s. (Rs. 4) each, most of the blankets woven are black.

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Gold and Silver

Goldsmiths who make gold and silver ornaments are found in all large towns. The gold and silver is generally given by customers and worked by the goldsmiths into ornaments at their homes. In rare cases goldsmiths are called by rich men to work at their houses and are paid £1 to £1 4s. (Rs. 10-12) the month. At Hubli and Dhárwár two or three clever goldsmiths cast gold and silver gods, set precious stones in gold, and make richly carved and engraved gold and silver work. Goldsmiths receive no help from the women of their families. The average earnings of a goldsmith's family are £10 to £20 (Rs. 100-200) a year. As a class they are fairly off. During the 1876-77 famine they bought gold and silver ornaments at low prices and made considerable profits. Like tailors, goldsmiths are proverbially fond of stealing part of the materials given to be worked.

Copper and Brass.

Workers in copper and brass, called Kanchgars if Hindus and Tambatgars if Musalmans, are chiefly settled in Hubli where there are about 400 families. The copper and brass are brought in plates or sheets from Bombay. The chief cooking and water pots are handás or large round vessels, tapelás or small vessels, panchpátris or mugs, kolgás or jars, tábans or plates, gangáls or round and short bathing tubs, kodás or pitchers, samayas or lamps, dabaris or basins, and parats or large plates. These vessels vary from about two or three inches across and as many high to three to five feet across and three to four feet high. Besides these copper and brass vessels coppersmiths make belimetal bells and gong plates from khanchu or belimetal a mixture of copper and lead or tin. Musalmans and Lingávats generally use white or bellmetal vessels because there is no risk that from want of tinning they should grow poisonous. Besides supplying the local demand the Hubli coppersmiths send copper and brass pots to Belgaum, Bangalur, and Belári. Copper and brass smiths are a thriving class. The copper and brass sheets are brought from Bombay through Kárwár and Kumta by local dealers of the Bogár, Lingáyat, Márwári, and Musalmán castes. The coppersmiths buy them from the copper-dealers paying 71d. to 10d. (5-63 as.) a pound. They sell their wares at 81d. to 115d. (51-74 as.) a pound, leaving a profit of $\frac{3}{4}d$. to $1\frac{1}{6}d$. $(\frac{1}{2}-1 as.)$ the pound. During the 1876-77 famine coppersmiths bought old copper and brass vessels at low prices and have since re-sold them at a profit. There has also been a brisk demand for new vessels, and, in the low prices of grain, they have been able to save considerable sums.

IRON.

Two classes, blacksmiths and iron-smelters, live by working in iron. Almost every town or large village has its blacksmith, Lohar (M.), Kambar (K.), who lives by making articles of iron. Some of these articles are made from lumps of local iron costing about 3d. (2 as.) and about a pound in weight. The rest are made from sheets and

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plates of iron brought from Bombay and Madras. Of the local iron-smelters some account is given below. The iron sheets and plates are brought from Bombay through Kárwár and Kumta by Bohoras and other Musalmans. The present (1884) price of iron sheets in the Dhárwár markets varies from 12s. to 14s. (Rs. 6-7) the hundredweight. The blacksmiths, some of whom are men of capital and others are labourers, buy the iron and make it into axes, pickaxes, spades, and other field tools for which husbandmen pay them either in grain or in cash. Blacksmiths also make measures of capacity, tires for wheels, cocoa-kernel and cucumber graters, hoops for tubs, spoons, round plates for baking cakes, lamps, nails, locks, keys, and hooks. The women and children help the men either in blowing the bellows or in heating the iron orsteel before it is beaten. The yearly earnings of a blacksmith's family average about £10 (Rs. 100). They suffered much in the 1876 famine from want of work, but during the last four years cheap iron, a brisk demand for their wares, and cheap grain have enabled them to recover much of what they lost.

IRON SMELTING.

Iron is smelted by about thirty Kudivakkalgeri Lingáyats in the village of Tegur fifteen miles north of Dhárwár. The ore is dug out of the Tegur spur of the Sahyadris and the charcoal is made by burning firewood. The ore is broken small by hand-hammers and put with some charcoal into an earthen crucible. Each crucible measures about a foot and a half across inside and two and a half feet outside and is five feet high. On one side of the bottom of the crucible a hole is made and in the hole a clay pipe is When the furnace below the crucible is sufficiently heated the ore in the crucible melts, and the melted iron runs out by the pipe at the bottom of the crucible into an earthen basin placed to receive it and forms a lump of iron. The lump of iron is removed twice a day at twelve in the morning and at five in the evening. is heated in another open furnace, laid on an anvil, and beaten by four hammermen into bars about a pound in weight and three feet long and an inch and a half square. The four hammermen work together with much regularity and skill. Each crucible yields two bars a day, the bar being worth about 3d. (2 as.) the pound. Iron was formerly smelted at many places besides at Tegur. But chiefly from want of fuel the smelting did not pay and the works were closed.

There are two classes of tin-workers, makers of tin articles and tinners of copper and brass vessels. In Dhárwár, Hubli, and Gadag a few Bohoras make tin lanterns, boxes, lamps, glass-cases, small water pipes, tumblers, and toys. The tin plates and the glass panes come from Bombay. All the tinware used in the district is bought at Dhárwár, Hubli, or Gadag. Before tinning them brass and copper vessels are heated and pieces of tin and sal ammoniac are put into them. When the tin and sal ammoniac have melted, the vessel is held fast with a pair of iron pincers and the melted tin is rubbed all over it with a handful of cloth. As a rule Hindus get their vessels tinned inside only and Musalmáns both inside and outside. The cost of tinning varies from 1½d. to 1s. (1-8 as.) according to the size of the vessel.

Three classes work in stone, Josigerus who make stone vessels and Uppárs and Vaddars who work as masons and cut grindstones. All the stone used in the district is found in local quarries. The Josigerus hollow out of a block of soft black stone, called pot-stone in Madras, round cups about five inches across and four high, jugs and tubs about two feet across and a foot high, and large round plates about four feet across and five inches high. These vessels are roughly smoothed by the chisel and sold at $1\frac{1}{2}d$, to 6s. (Rs. $\frac{1}{16}$ - 3). sourness causes no corroding or unwholesomeness these stone vessels are of great use in preserving pickles and other sour articles for a year, in cooking sour vegetables, in boiling milk, and in keeping buttermilk. It is a common experience that vegetables cooked in stone have more flavour than vegetables cooked in metal. All the stone vessels made are sold in the district. Besides working as masons or stone-cutters, Uppars and Vaddars make grindstones. To make grindstones hard stones are cut into two equal circular pieces, each two to three feet across and two to three inches thick. Of these two stones, which are laid one over the other at the time of grinding, the lower stone has a hole in the centre in which a small wooden peg is fixed as a pivot. The upper stone has two holes, one a large hole in the centre through which the stone passes down on the pivot fixed in the lower stone. The other is a side hole in which a wooden peg about a foot long is fixed as a turning handle. Grindstones are sold at 2s. (Re. 1) the pair, and a pair is found in almost every house. They are used in grinding grain into flour. At the time of grinding, some handfuls of grain are put into the central hole of the upper stone which is turned by the hand with the handle fixed in the side-hole. Except large and heavy stones which require two women, grindstones are generally worked by one woman. After two or three months the grindstones are roughened by Vaddar women who strike them with a heavy hammer which has steel nails fixed into its head. The cost of roughening a pair of grindstones is about ${}^3_{a}d$. (${}^{\frac{1}{4}}_{a}a$.). Besides a pair of grindstones each house has generally a stone mortar fixed in the ground close to the grindstone. In the stone mortar grain is pounded by four feet long wooden pestles whose ends are shod by iron rings. Stone mortars are made by Uppars and are sold at 8s. to 12s. (Rs. 4 - 6).

In almost all towns and large villages earthen pots, tiles, and bricks are made by Lingáyat potters. The clay in general use is a soft and sticky mud from marshes and from the bottom of ponds. It is cleared of stones and well worked with the hands and feet. When properly kneaded the lumps of clay are laid on the centre of a heavy wheel which turns horizontally on a pivot. The potter holds a short wand or bamboo cane in his right hand, and putting the point of the cane close to one of the spokes of the wheel presses it with force till the wheel turns at a high speed. As the wheel turns the potter moulds the whirling clay with his two hands, the squat lump of mud quickly rising outwards and upwards into a shapely jar. When the vessel is properly formed the wheel is stopped, a wetted string held in the two hands is sharply drawn between the bottom of the vessel and the wheel, and the vessel is

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Wood.

Wood-workers, who are found in almost every large village, are Jingars or curpenters, and Musalmans. Besides making the wood-work of field tools, cots, cradles, chairs, boxes, tables, stools, and houses, Jingars make wooden figures of tigers, horses, men, cats, and dogs, and other toys, colour them, and sell them on market days and in fairs. Jingars and a few Musalmans in large towns make wooden hair-combs, and a few Hubli Musalmans make weaving or loom combs. Hair-combs are thin wooden plates two or three inches Hair-combs are of two kinds, head-combs which are toothed on both edges and beard-combs which are toothed only on one edge. Ivory combs are also brought from Bombay. The wearing or loom comb, which is laid across the web and through which the warp threads are passed, is about five feet long and three inches broad. It is made of strong reeds which are brought from the Parvat Milar hills about 430 miles south of Dharwar in Karnul iu Madras, and, after being cut, are formed into a close row of reeds like the teeth of a comb which are kept in their place by a heavy wooden Each time the shuttle passes the comb is pulled towards the weaver so as to drive the thread into its place. A weaving comb costs 6s. to 8s. (Rs. 3-4). Another article made by wood-workers is a pair of wooden grinders on the model of grindstones four to five feet across and a foot and a half thick; they are made of mange or other light wood, as teak or other hard timber would crush the grain. They are used in unhusking rice. The grinding faces are carred like the teeth of a saw, partly in one direction and partly in another. When in regular use they have to be roughened every eight or nine weeks and do not last more than a year or two.

MOLASSES.

In all parts of the district molasses is made from sugarcane. Close to sugarcane fields large wooden sugarcane-mills are fixed in the ground, and near the mills a furnace is made for boiling the juice. The cane is brought from the fields in headloads and piled near the mill. The mill, which is worked by four to six bullocks, consists of a long wooden shaft to which the bullocks are yoked, and of two wooden rollers whose surface is carved with screw rings which work into each other like a male and female screw. As the bullocks go round, the rollers turn in opposite directions and crush the cane with which they are kept constantly fed. The juice runs into a large earthen vessel which is buried close to the rollers. A man sits on the opposite side of the rollers, draws off the pressed canes, and hands them back to the feeders who double them and again pass them between the rollers. This is repeated a third time when the whole juice is supposed to be pressed out, and the pith of the pressed cane is spread in the air to dry and is generally used to boil the juice. When the vessel into which

the juice runs is filled, the juice is taken to the furnace and poured into an iron pan about four feet high and eight feet across at the top and four or five feet at the bottom. The pan is put on the furnace, and a large fire is lighted below. After boiling for about six hours the juice thickens into liquid molasses. The liquid is taken out and put into round or square holes in the earth which are lined with cloth. It is then allowed to cool; when it thickens the molasses is ready for use and sale. In an ordinary year the price varies from $1\frac{1}{2}d$, to 2d, the pound (Rs. $1\frac{1}{2}-2$ the man). Since about 1840, when the Mauritius cane was introduced, a little white sugar and sugarcandy have been made in Hángal. They are inferior to the China and other sugar imported by Vengurla and Kúrwár. Formerly all the fine sugar and sugarcandy were imported by Rájápur in Ratnágari and went by the name of Rájápur sugar.

Glass Bangles are made by about ten famililes of Bogár or Jain bangle-makers. Of the raw materials bangle glass is brought in lumps from Belári at about £2 the hundredweight (Rs. 41 the man). In Belári bangle glass is made by melting a particular sand with some alkalis. At the time of melting bangle glass is coloured either green, blue, red, or black. In making bangles a lump of this glass is melted in a haif-closed earthen caldron. Four men sit round the caldron. Each thrusts into the molten glass a long iron spike with a bent end. When it is drawn back, the spike brings with it a few grains of melted glass. Tho bangle-maker, who is standing close by, immediately taps with a knife the head of the bent end of the spike, and while it is yet red-hot the molten glass runs up the spike like a small ring. The red-hot glass ring is with the help of some cross nails at once moved to a cone-shaped iron rod set upright in the ground about two feet from the furnace. The iron rod is then turned round on a roller and the bangle is shaped with a knife. In this way a bangle-maker shapes about twenty-five bangles in fifteen minutes. In one day four men working together can make a man or twentyfive pounds of lump glass into 4500 bangles. When the day's work is over, the makers gather and string the bangles. These are sold at about £2 10s. the hundredweight (Rs. 51 the man). The banglemakers earn about £10 (Rs. 100) a year. These glass bangles are worn by the women and girls of all castes except by some widows. Except some under twenty whose heads have not been shaved, Bráhman widows do not wear bangles; Marátha and other widows break their bangles at the death of their husbands, and afterwards put on new ones. Musalmán widows do not wear bangles. As glass bangles are in great demand, they are brought from Bombay, Belári, and Maisur by Bogár-Jain and Musalman bangle-dealers.

Oil is extracted chiefly by Lingáyat Ganigiás from sesamum, linsced, safflower, and castor seed, grown in the district and bought by the oil pressers from the growers. Small quantities of oil are also extracted from spices and almonds for medicine and perfume. From sesamum linsced and safflower the oil is extracted by pressing the seeds in an oil mill; from castor seed the oil is extracted by boiling its pulp in hot water; and from spices and almonds

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GLASS BANGLES.

OIL

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the oil is extracted by distilling. The mortar of the oil mil used in pressing sesamam, lineved, and sallower is a lurs stone eight feet long and about twelve feet round. part is baried in the ground. The upper three feet as hollowed out and lined inside with wood, which has to be renowed once a year. None of the three grains, secamum lineed or safflower, is put alone in the mortar. If any of these is pressed by itself it yields little oil, while if equal quantities of any two er more of these grains are pressed together, the outturn is greatly increased. After the stone mortar has been fresh lined with wood it does not hold more than twenty-nine pounds (8 sheet) of seed. Afterwards, when the roller or piston wears away the wood, the mortar daily holds a larger quantity of grain, till, in the course of a year, it can hold 115 pounds (32 sherr) of seed. Before putting them into the mortar the seeds are slightly wetted The roller is turned round and round in the mortar by means of bullocks voked to a cross shaft which is attached to the roller from outside. This process expresses and separates the oil from the seed. The oil is taken out for uso and the crushed seed is scraped out and used as cattle food. When a mortar holds only twenty-nine pounds (8 shers) of seeds two good bullocks take about two hours to press the oil. When the mortar begins to hold up to 115 pounds (32 shers) the pre-sing takes about twice as long. So with a freshly repaired mill oil is drawn out six times a day and only three times when the wooden lining gets worn. Sesamum oil is sold both wholesale and retail at about 31d, to 41d, the pound (Rs. 3.4 the man of twenty pounds). In retail oil is generally sold from house to house by Ganigia women. Since 1870 the importation of kerosine oil has greatly reduced the profits of the oil-pressers.

To extract oil by boiling, castor seeds are parched in pans until they become red, and give out a pleasant smell, when they are pounded to flour in a mortar. The flour is thrown into an earthen vessel about half full of boiling water, and it is allowed to boil until nearly all the water has passed off in steam. By this time, the oil begins to float and it is carefully poured into another ressel and preserved. The oil is now in its purest state fit for anointing a new-born babe.

Oil is distilled from spices and almonds. The almonds or spices from which the oil is to be distilled are put in an earthen cup with a little water in it. Under the cup a strong fire is lighted. The cup is covered with a second cup having a horizontal tube fastened to it, and the division between the two cups is carefully closed with clay. A wet cloth is laid on the top of the upper cup and cold water is constantly dropped on the cloth. By keeping the cup cool the vapour of oil that rises from the heated jar condenses and passing down the tube drops into a third cup. In the second form of still, which is less common than the first, the cooling or condensing is done by earth not by water. A jar is buried in the ground and over its month is set a second jar with a very small hole bored in its bottom. The oil seed is put into the upper jar, its month is carefully closed, and the whole jar is surrounded with fire. The cool air in the lower jar condenses the vapour and the oil falls in drops into it.

Redpowder or kunku, literally saffron, is made at Dhárwár and in a few other places. At Dhárwár about thirty families of low-caste Hindus and two or three families of Musalmáns make redpowder. A small quantity is also made by Bráhmans as some strict Hindus will use none but Bráhman-made redpowder. To make redpowder six pounds of turmeric root are soaked in water for three days, dried, and broken into pieces. The pieces are soaked for three days in a liquid mixture of lemon-juice and powder of three-fourths of a pound of balgar or borax and five-eighths of a pound of alum or fatki. They are then dried and ground into fine redpowder called kunku. The materials cost about 2s. 6d. (Rs. 1½), and yield seven pounds of kunku worth about 3s. 6d. (Rs. 1½) at the selling price of 6d. (4 as.) the pound. Sometimes, to deepen the colour, a few drops of oil are added to the kunku, but this colour soon passes off. All Hindu women whose husbands are alive mark their brows with redpowder.

Besides English ink, which is much used in public offices, two kinds of local ink are made. Of these one kind is used in public offices in writing on country paper and the other is used by Brahmans in writing religious books. To make the native official ink one-sixteenth of a pound of rice, Indian millet, and rági are put in an earthen vessel and placed on a furnace. When the grains are about to take fire, a gallon of water is poured into the vessel, and the whole is allowed to boil. The liquid is strained and poured into a plate. Lamp-black tied in a cloth is then ground into the liquid and the ink is ready for use. This ink does well for writing on country paper into which it soaks a little, but when written on smooth polished paper it is easily washed off. In writing religious books both black and red ink are used. To make black ink two and two-thirds ounces (6 tolás) of good scaling-wax or bhangardargu and four-fifths of an ounce (2 tolás) of balgar or borax are boiled together for about an hour in a pint (40 tolás) of water, and the liquid is strained. Some lamp-black tied in a cloth is ground into the liquid and the ink is ready. shines when written, cannot be scratched or washed off the paper, and is said to last unfaded for centuries. red ink two and two-fifths ounces (6 tolás) of bad sealing-wax or khaddiargu, four-fifths of an ounce (2 tolds) of balgar or borax, one-fifteenth of an ounce (lola) of alikhan Eschynomene aspera leaves, and two-fifteenths of an ounce (1 tola) of chijjikhar or alkali, are boiled together in one pint (40 tolas) of water, and the liquid is strained. This forms a good red ink. If lampblack is added, it turns to a dull but serviceable black ink.

There are two classes of leather-workers, tanners and shoemakers. The tanners are chiefly Madigerus, Holerus, and Dhorarus. The skins are stripped off dead animals and the inside is rubbed with water and lime at two to four pounds for each skin. The skins are then steeped in water for fifteen days. The hair is next scraped off with a broad blunt knife and the skins are again steeped in a mixture of myrobalans and babbul bark for six days when they are taken out and dried into leather. The leather is partly used in making shoes, ropes, and other articles of husbandry, and is

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REDFOWDER.

INK.

LEATHER.

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partly sent by hide-dealers to Bombay and Madras. Shoemakers are either Mochigárarus or Samgars (K.). Samgars or Chámbhán make and mend shoes and sandals, tan, and cover bamboo boats with leather. Shoes and sandals are sold at 1s. to 4s. (Rs. ½-2) the pair.

SALTPETRE.

Three crafts, the making of saltpetre, earth-salt, and paper, have almost or altogether died out. In 1841 salt petre was made at Dhárwár. In a plain outside of the town men of the Uppar caste raised an earthen mound or pillar about fifteen feet high and 100 feet round. On the top of the mound were built seven or eight basins of lime and stones each about four feet across and ten feet deep. At the bottom of each of these basins was a hole carefully filled. In the ground round the mound several pits were dug five or six feet square and a foot deep. From each of these pits a channel two or three inches broad led to the hole at the bottom of each of the basins. The hole in each of the masonry cisterns on the top of the mound was then filled with leaves from the inside and the cistern was partly filled with saltearth or saulumannu. Over the salt-earth water was poured, which, draining through the salt-earth and leaves, passed out by the channels and brought all the saltpetre into the small pans or pits. When the pits were full the holes were stopped and the water was left to dry in the san. When the pan was dry the saltpetre was scraped off the bottom and purified. At present (1883) one shepherd family who call themselves Uppars that is salt-makers make saltpetre in the jágir village of Hebli. The right of making saltpetre is yearly farmed for about £1 7s. (Rs. 131) by the two sharers of the Hebli estate. Every year, provided no rain falls during these two months, saltpetre is made between January and March. If rain falls the saltpetre is washed away and the labour is wasted. During these two months about 900 pounds (36 mans) of saltpetre are yearly made and fetch about £5 8s. (Rs. 54) at 11d. the pound (Rs. 11 the man).

EARTH SALT.

About thirty years ago earth salt, called in Kanarese sauluppu that is brackish salt and manuppu that is earth salt, was extracted in several parts of Dharwar from a peculiar kind of earth containing salt. Earth salt was made in the same way and by the same class of people as saltpetre. The making of earth salt has been stopped under the salt act, Act VII. of 1873.

Papen.

About twenty years ago, paper was made at Dhárwár, Gadag, Gutal, Huhli, Karajgi, Navalgand, Ránebennur, and several other places in Dhárwár. Since then the craft has almost or altogether died away under the competition of better and cheaper European paper.

¹ Saltpetre has two names in Kánarese soruppu and moddupu. Uppu means salt, and as saltpetre when fired makes a noise like sor it is called soruppu that is the sor sounding salt. Saltpetre is also called modduppu or gunpowder salt. Though spelt in the same way Uppar a salt-maker is differently pronounced from Uppar a mason. Rav Babadur Tirmalrav.

CHAPTER VII.

HISTORY.

THE traditional history of Dhárwár goes back to the time of the Hangal fifty miles south of Dharwar in inscriptions of the twelfth century is called Virátkot and Virátnagari, the Fort and City of Virát, and is locally believed to be the place where the Pandavs (B.C. 1500) lived during part of their exile. The names Virátkot and Virátnagari support the tradition, as, according to the Mahabharat, Virát was the name of the king at whose court the Pandavs spent the thirteenth year of their exile.1

The earliest historical information regarding Dhárwár belongs to the fifth century after Christ. For the history of the eight hundred years between the fifth century and the Muhammadan conquest of the Deccan under Alá-ud-din Khilji (1290-1310) an unusually large number of copperplates and stone inscriptions record the names of dynasties and kings, the year of the inscription sometimes in the Kaliyug but more commonly in the Shak era,2 the nature of the grant, to whom made and why, and generally add details which throw light on the state of the country at the time. So far about ten copperplates and 600 stone inscriptions have been collected and deciphered at first (1825-1840) by Sir Walter Elliot for some time Sub-Collector of Hubli, and of late years (1870-1884) chiefly by Mr. J. F. Fleet, of the Bombay Civil Service. Banavási in Sirsi in North Kánara, now a little outside of Dhárwár limits, may be regarded as the earliest historical capital of the Dhárwár country. Buddhist references carry the history of Banavási to the third century before Christ, and local inscriptions show that it was a centre of power in the first century after Christ. From the first to the end of the thirteenth century many inscriptions prove that Banavási was the centre of a large territory called the Twelve Thousand which must have included at least the centre and south of the present district of Dhárwár. Next to Banavási, Pánungal or Hángal is the oldest local historical centre. Other ancient places of importance are Annigeri thirty miles east of Dhárwar mentioned in or containing sixteen inscriptions of the eleventh to the sixteenth centuries; Bankápur forty miles south of Dhárwár mentioned in or

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¹ Mahabharat, book iv. Virátparv; Indian Antiquary, V. 179; Flect's Dynastics of the Kanarose Districts of the Bombay Presidency, 7 note 2,

2 The initial date of the Kaliyug is the spring equinox of E.C. 3102; the Shak era begins in A.D. 78 (March-April).

Chapter VII. History. EARLY HISTORY. containing seven inscriptions of the eleventh and twelfth centuries; Chaudadampur fifteen miles north of Ranebennur mentioned in or containing eight inscriptions of the ninth to the thirteenth centuries: Dambal fifteen miles south of Gadag mentioned in or containing five. inscriptions of the eleventh and twelfth centuries; Gadag forty-five miles east of Dharwar mentioned in or containing nineteen inscrip. tions of the twelfth to the sixteenth centuries; Lakkundi eight miles south of Gadag mentioned in or containing thirty-five inscriptions of the ninth to the thirteenth centuries; Lakshmeshvar forty miles south-east of Dhárwar mentioned in or containing twenty-nine inscriptions of the tenth to the sixteenth centuries; Naregal sixteen miles north-east of Gadag mentioned in or containing nine inscriptions of the tenth to the thirteen centuries; and Rattehalli ten miles south-east of Hirekerur mentioned in or containing seven inscriptions of the twelfth to the sixteenth centuries. Almost all of these places, though now reduced in importance some even to petty villages, have ruins of beautiful stone temples varying from the ninth to the thirteenth century, built without mortar in what is locally known as the Jakhanacharya style.2

Of Shátakarni or Ándhrabhritya rule in Dhárwár (B.C. 200 -A.D. 200) there is no local record.3 Considering the wide spread of Shátakarni sway in the Deccan, at Kolhápur, and at Banavási, it is probable that during the centuries before and after the Christian era the lands now included in Dhárwár were subject to the Banavási branch of the Shatakarnis.4 After the Shatakarnis the district probably passed to the Ganga or Pallav kings.5 The accession to power of the Early Kadambadynasty of Banavási and Halsi in Belgaum, after

Kadambas. 50O.

¹ Details are given below under Places.

² Jakhanáchárya is said to have been a prince who having accidentally killed a Bráhman, employed twenty years in building temples from Benares to Cape Comorin to atone for the sin of Bráhman-killing, Ind. Ant. I. 44. In style and date Jakhanáchárya's temples correspond to Hemádpant's temples in Khándesh and the North Deccan.

temples correspond to Hemadpant's temples in Khancesn and the North Deccan.

The Shatakarnis, better known by their Puranik name of Andhrabhrityas, were a powerful Deccan dynasty which is supposed to have flourished in the three centuries before and after the Christian era. Their original seat was A'ndhra or Telangan, and their capital Dharmkot at the mouth of the Krishna. At the height of their power (about A.D. 10-40) they appear to have held the whole breadth of the Deccan from Sopara in Thana to Dharmkot near the mouth of the Krishna. Their inscriptions and coins have been found at Kanheri and Sopara in the Konkan, at Inscriptions and coins have been found at Annieri and Sopara in the Konkan, at Junnar, Karhád, Kolhápur, and Násik in the Deccan, at Banavási in North Kánara, at the Amravati tope in the Kistna district, and in other parts of the Madras Presidency. Details are given in Bombay Gazetteer, XIII. 409; XVI. 181-183, 620-623.

4 An inscription at Banavási shows that about the first century after Christ its ruler was Háritiputra Shátakarni of the Vinhukadadutu family. Details are given

ruler was Haritiputra Shatakarni of the Vinhukadadutu family. Details are given in Bombay Gazetteer, KV. Part H. 77, 261.

⁵ The Gangas were an early and important family in Maisur. Their history is doubtful as Mr. Fleet (Kanarese Dynasties, 11-12) has shown reasons for believing that several of the inscriptions regarding them are forgeries. The Pallar dynasty was one of the most important enemies against whom the Kadambas and afterwards the Chalukyas had to fight. About the middle of the sixth century they were probably driven out of Vatani or Badami by Pulikeshi I. Early in the seventh century the Eastern Chalukyas forced them out of Veogi on the east coats between the Krishna and the Goddwari. In the time of the Western Chalukyas Pulikeshi II. (610-634) their capital was at Kanchi or Conjeveram and they long continued a powerful dynasty. The Pallars rank in the Purans with the forcign races, the Haihayas, Shaks, and Yavaus. Mr. Fleet (Dynastics, 15) has shown reasons for believing that they were Arsacidan Parthians. believing that they were Arsacidan Parthians.

defeating either the Gangasor the Pallays, is the first certain event in local Dharwar history. These Kadambas, whose origin is not yet fixed, were a family of Jain chiefs whose capital was Banavasi and who had minor centres at Uchhrangi near Harihar in North Maisur, at Halsi in Belgaum, and at Triparvat perhaps Trigiri or Tegur in North Dharwar. Their copperplates, found among other places at Devgiri six miles west of Karajgi, give the names of nine kings and chiefly record, in letters of about the end of the fifth century, grants of villages and lands for the benefit of Jain temples.1 The subsequent early Hindu history of the district may be divided into three periods. An Early Chalukya and Western Chalukya period lasting from about the begining of the sixth century to about A.D. 760; a Ráshtrakuta period from A.D. 760 to A.D. 973; and the third and last period of Western Chulukya (978-1165), Kalachuri (1165-1184), Hoysala Ballal (1192-1203), and Devgiri Yaday (1210-1295) overlords, when, at least till the end of the twelfth century, the district was directly governed by feudatory Kadamba chiefs whose head-quarters were at Banavási and Pánungal or Hángal. The Early Kadambas appear to have been defeated by the Early Chalukyas about the beginning of the sixth century.2 The earliest record of Early Chalukya rule in Dharwar is an undated tablet at Adur ten miles east of Hangal of the sixth Early Chalukya king Kirtivarma I (A.D. 567) recording gifts to a Jain temple built by one of the village headmen. The inscription gives the name of Kirttivarma as overlord, Adur or Pándipur as it is called in the inscription, being then directly governed by two chiefs named Sind and Madhavatti. This inscription in the heart of the Kadamba territory supports a statement that Kirttivarma defeated the Kadambas which occurs in an important inscription at Aihole, fifteen miles north-east of Badami, dated A. p.634-5.3 Of the Western Chalukyas (610-760) the earliest local record is a stone tablet at Amin-bhavi seven miles north-east of Dharwar. It belongs to the second Western Chalukya king Pulikeshi II. (612-634), the contemporary of the famous Chinese pilgrim Hiwen Thing (629-643), but is wrongly dated 561 (S. 468).6 The next inscription is a forged grant of the second Western Chalukya king Vikramáditya I. (670-680). It was found at Kurtkoti, about eight miles south-west of Gadag, and bears date 610 (S. 532). It was probably forged in the ninth or tenth century.6 Of the three next kings, Vinayaditya (680-697), Vijayaditya (697-733), and Vikramaditya II. (733-747) stone tablets, dated 687, 729, and 734, and recording grants to Jain temples and priests, have been found at Lakshmeshvar twenty miles north-east of Bankapur.7 About 760, when the Rashtrakutas overthrew the

Chapter VII. History. EARLY HISTORY. KadambasJ00.

> Chalukyan, 510-760.

¹ Fleet's Kanarese Dynasties, 7-10.

² Ind. Ant. VIII. 23; Fleet's Kanarese Dynasties, 21.

⁴ Hiwen Throng calls him Pu-lo-ki-she and gives an account of his kingdom of Mo-ho-la-ch'a or Maharashtra twelve hundred miles in circuit. A special interest attaches to Pulikeshi as an Arabic chronicle relates that in 625 Khosru II. of Persia sent an embassy to him which is believed to form the subject of painting 17 in Ajanta Cave I. Details are given in Fleet's Kanarese Dynasties, 21-25; and Bombay Gazetteer, XII, 513.

⁵ Fleet's Kanarese Dynasties, 27; Ind. Ant. VII. 217.

⁷ Fleet's Kanarese Dynasties, 27, 28, 29; Ind. Ant. VII. 110, 112.

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EARLY HISTORY. Káshtrakutas, 760-973.

Western Chalukyas, Dhúrwár, liko their other possessions, seems to have passed from the Chalukyas to their conquerors. The earliest record of Rushtrakuta rule in Dharwar is an undated fragment at Lakshmeshvar of the fourth king Govind III. (803-807), whom the inscription calls Shriballaha or Shrivallabh. Five inscriptions are dated in the reign of Govind III.'s son Amoghvarsh I. (814-877). Of these one, dated 865, was found at Mantravadi four miles ear of Shiggson; a second dated 866 in the fifty-second year of his reign was found at Shirur seventeen milesnorth-west of Navalgund; a third, dated 869 and found at Soratur ten miles south of Gadag, records that Amoghvarsh's feudatory Ahavaditya of the Aday (Yaday ?) dynasty was then governing the Kuppeya Purigere or Lakshmeshrar province; and two undated occur at Nidgundi five miles west of Bankapur and at Kyasanur seven miles south-west of Hangal The Shirur inscription records that Amoghvarsh's feudatory Devannayya governed the Belvola Three Hundred at Annigeri.3 The Nidgundi inscription records that Amoghvarsh I.'s (851-877) fendatory, Bankeyaras of the Chellaketan family, governed the Banavási Twelve Thousand, the Kundur Five Hundred, the Belvola Three Hundred, the Puligere or Lakshmeshvar Three Hundred, and the Kundarge Seventy. The Kyásanur inscription records that Amoghvarsh's feudatory Shankargand, also of the Chellaketan family, governed the Banavasi province. Of Amoghvarsh's son Krishna 11. (902-911) three inscriptions have been found in Dharwar, two dated at Mulgand twelve miles south-west of Gadag and at Adar ten miles east of Hangal and one undated inscription at Kyasanar seven miles south-west of Hangal. The Mulgund inscription, dated 902, calls Krishna, Krishnavallabh, and the A'dur inscription, dated 904, calls him Akalvarsh, and records that the Banavasi Twelve Thousand was governed by his under-lord a Mahásámant of the Chella-The undated inscription at Kyńsanur calls Krishna ketan family. Kandarvallabh and records that the Banavasi province was governed by his under-lord the Mahásámantádhipati Shaukargand of the Chellaketan family. Of Krishna's son and successor Jagattung II. probably also called Prabhutvarsh a stone inscription dated 918 has been found at Dandapur two miles north-west of Nargund. Jagattung's son and successor was Nityamvarsh or Indra IV. a stone inscription of whose, dated 916, probably while he was ruling as heir apparent during his father's lifetime, has been found at Hatti-Mattur six miles north of Karajgi. Indra IV.'s successor was his younger son Govind V. an inscription of whose, dated 930, has been

¹ Fleet's Kanarese Dynasties, 34. ² Fleet's Kanarese Dynastics, 35. ³ Ind. Ant. XII, 216.

³ Ind. Ant. XII. 216,
⁴ Belvola or crop-land, the Kanarese bele to grow and hole a field, was the country round Gadag, Lakhundi, and Dambal in Dhárwár, Huli in Belgaum, and Kukkanur in the Nizám's Dominions. Fleet, 42 note 3. In a palm-leaf manuscript of the Kolhápur Jains the Chellaketan Bankeyaras or Bank is said to have called after himself the famous city of Bankápur, the greatest among cities. It was the capital of the Vanavás or Banavási province under the Chellaketans. Ind. Ant. XII. 217.
⁵ The Sántalige Thousand was a part of Maisur and the Kisukád Seventy was the country round Pattadakal in South Bijapur. Fleet's Kanarese Dynastics, 42.
⁶ Fleet's Kánarese Dynastics, 35.

found at Kalas fifteen miles north-east of Bankapur. Of the next Ráshtrakuta king Krishna IV. (945-956) four inscriptions have been found two dated 945 at Kyásanur seven miles south-west of Hangal, the third dated 951 at Soratur ten miles south of Gadag. and the fourth dated 956 at Alur five miles south-east of Hangal. The Kyasanur inscriptions call Krishna, Kannara, and record that his underlord the mahásámanta Kalivitta of the Chellaketan family was governing the Banavási province.2 The Soratur inscription gives the name of the commandant of the king's bodyguard Rudrapayya as governing the city of Saratvur.3 In 973 Krishna IV.'s son and successor Kukka III. was defeated and slain by the Western Chalukya Taila II. who put an end to Ráshtrakuta rule. Dharwar, with the rest of the Rashtrakuta territory, passed to the revived Chalakyas whose capital later on (1050) was Kalyán in the Nizám's country about forty miles north of Gulburga. They continued to rule Dharwar through their feudatories the Kadambas of Banavasi and Hangal The earliest record of Western Chalukya (973-1190) sovoreignty in Dharwar is an inscription at Gadag which describes Taila II. (973-997) as having uprooted the Rattas or Rashtrakutas, slain Munj king of Malwa, killed the leader of Panchal in Upper India, and reigned over the whole earth for twenty-four years beginning with 973 (S. 895), the cycle year being Shrimukh. Another of Taila IL's inscriptions at Talgund in Maisur dated 997 records that his underlord Bhimras, who was honoured with the title of Tailap's Champion, governed the Banavási province. Of Taila II.'s son and successor Satyáshraya II. (997-1008) three inscriptions have been found in Dhárwár; at Gadag dated 1002, at

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Western Chalukyas, 973 - 1190.

¹ Ind. Ant. XII, 223-225, 249. Between Govind V. and his successor Krishna IV. are inserted the names of Krishna III., Amoghvarsh II., and Khottiga. These chiefs

are inserted the names of Krishna III., Amoghvarsh II., and Khottiga. These enters do not appear to have reigned.

Fleet's Kanarese Dynasties, 87, 88. An inscription of Krishna IV.'s elder brother Khottiga, dated 971, has been found at Idargunchi village in Hubli. The inscription mentions Khottiga's underlord the Ganga Mahamandaleshvar Permanadi Marsimh as governing the Gangvádi Ninety-six Thousand in Maisur, the Purigere or Lakshmeshvar Three Hundred, and the Belvola Three Hundred, and gives the names of two places Sebbi or Chabbi six miles south of Hubli and Ron the chief town of the Ron sub-division. Khottiga left no issue, and this explains why his date 971 is considerably later than the dates of his younger brother Krishna IV. which begin with 945. It appears that when it became improbable that Khottiga should leave any issue, his younger brother Krishna IV. and afterwards Krishna's son Kakka III. were

It appears that when it became improbable that Khottiga should leave any issue, his younger brother Krishna IV. and afterwards Krishna's son Kalka III. were joined with him in the government. Khottiga seems to have died between the date (971) of the Idargunchi inscription and the date (972) of Kakka's Karda plates. Ind. Ant. XII. 255.

Ind. Ant. XII. 255.

Ind. Ant. XII. 257.

Kakka III.'s overthrow. Whether after Kakka's defeat and death the Rashtrakutas lost all their power, or whether, for a time, the Rashtrakutas continued to govern as the underlords of the Western Chalukyas is not certain. An inscription at Hebbal village near Lakhmeshvar is dated 974-5 and gives the names of two Ganga chiefs as underlords of Kakkaldev and governing the Puligere and Belvola Six Hundred, the Kisukád Seventy, and the Báge Seventy. The inscription invests Kakkaldev with the usual titles of supreme sovereignty, which seems to show that Krishna IV. survived his son's overthrow and continued to hold some power, or that Kakka III. had a son governing the southern provinces of his kingdom who maintained himself against the Western Chalukyas longer than his father. Ind. Ant. XII. 270-271. Ant. XII. 270-271.

Fleet's Kanarese Dynastics, 40 - 41.

Fleet's Kanarese Dynasties, 41-42.

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Kanneshvar ten miles south-east of Hangal dated 1005, and at Munvalli one mile north-west of Bankapur dated 1008. The Gadag inscription records that under Satyáshraya as overlord, Sábhangas or Sobhanras governed the Belvola Three-Hundred and the Puligere or Lakshmeshvar Three-Hundred. The Kanneshvar inscription records that Satyáshraya's underlord Bhimráj, known as Taila's Champion governed the Banavási, Kisukád, and Sántalige districts. Of Satyáshraya II.'s nephew and successor Vikramáditya V. (1008-1018) three inscriptions have been found in Dharwar; at Sudi nine miles north-east of Ron, at Alur five miles south-east of Hángal, and at Galagnáth twenty miles north-east of Karajgi. The Sudi inscription is dated 1010; the Alur inscription, also dated 1010, records that Vikramaditya's underlord Iriva Nolambadhiraj governed parts of Maisur and Dharwar; the Galagnath inscription is dated 1011.1 Of Vikramáditya's younger brother and successor Jaysimh III. (1018-1042) three inscriptions have been found. One dated 1025 is at Kalyan four miles south of Shiggaon, a second dated 1026 is at Hávangi seven miles south-east of Hángal, and a third dated 1033 is at Benkankond five miles south of Ranebennur.3 Among Jaysimh III.'s Dhárwár underlords and officers were the Mahamandaleshvar Kundamras of the Kadambas of Banavasi and Hángal³ who was governing the Banavási Twelve Thousand and parts of Maisur and Kanara; the Dandanayak Barmdev who in 1024 was governing the Taddevádi Thousand, the Belvola Three Hundred, and the Puligere Three Hundred; and the Mahamandaleshvar Mayurvarma II. of the Kádambas of Banavási and Hángal who in 1034 and 1038 was governing the Panungal or Hangal Fire Hundred. Of Jaysimh's son and successor Someshvar I. (1042-1068) inscriptions have been found at Nilgund twelve miles south-west of Gadag, at Adur ten miles east of Hangal, and at Ingalgondi eight miles south of Kod. The Adur and Nilgund inscriptions are dated 1044 and the Ingalgondi inscription is dated 1049. In 1044 Someshvar I.'s underlord in charge of the Panungal Five Hundred was Mayurvarma II. of the family of the Kadambas of Banavasi and Hangal; and in 1045 and again in 1062 the Mahamandaleshvar Chavundray of the same family was governing the Banavasi Twelve Thousand. Someshvar's aunt Akkadevi seems to have held a command during his reign, as, in an inscription dated 1047, she is mentioned as laying siege to the fort of Gokáge or Gokák in Belgaum. In 1049 Someshvar's eldest son Someshvar II. was governing the Belvola Three Hundred and the Puligere Three Hundred. In 1058 Someshvar's chief queen Mailaladevi was entrusted with the government of the Banavasi Twelve Thousand; and in 1055 Someshvar's second son Vikramáditya VI. was governing the Gangvádi Ninety-six Thousand in Maisur and the Bauavási Twelve Thousand with Harikesari of the family of the Kadambas

¹Fleet's Kánarese Dynasties, 43. ² Fleet's Kánarese Dynasties, 43; Dr. Burgess' Lists of Antiquarian Remains, 18, 00 00

^{23, 28.}This is the earliest mention of a Kádamba feudatory of the Western Chálukya kings after the Chellaketans (850 - 950).

of Banavási and Hángal as his subordinate in charge of Banavási. In 1068 Someshvar's underlord the Mahamandaleshvar Kirttivarma of the Banavási and Hángal Kádambas was governing the Banavási Twelve Thousand. An inscription of Someshvar's eldest son and successor dated 1071 mentions an incursion of a Chola king into the Western Chálukya dominions during Someshvar l.'s reign. Cholas invaded the Belvola Three Hundred, and, burning many temples, went to Puligere or Lakshmeshvar and there destroyed several Jain temples. The Cholas' success did not last long. Someshvar I. repulsed their army, drove them south, and slew their leader in a battle fought at Kakkargond, the modern Kakargundi, on the Tungbhadra between Hariharand Davangere in North-west Massur. Of Someshvar I.'s eldest son and successor Someshvar II. (1068-1075) five inscriptions have been found in Dhárwár: one dated 1069 at Sudi nine miles north-east of Ron; one dated 1071 at Soratur six miles southeast of Mulgund, one of uncertain date at Kallukeri six miles south of Hungal, and two dated 1072 at Gavrabad twelve miles north of Gadag and at Gudugudi five miles north-west of Hangal. Someshvar II.'s chief Dharwar underlords and officials were Lakshmanras, who, in 1071, was governing the Belvola Three Hundred and the Puligere Three Hundred and who repaired the Lakshmeshvar Jain temples which had been destroyed by the Cholas during the reign of Someshvar I.; and Udayaditya of the Ganga family, who, in 1071, was governing at the city of Bankapur and in 1075 had charge of the Banavási Twelve Thousand and parts of Maisur. Someshvar's II.'s successor was his younger brother Vikramáditya VI. (1073-1126) perhaps the most powerful king of his dynasty. Nearly two hundred inscriptions, not yet arranged, scattered over North Maisur, East Kanara, West and North-west Haidarabad, and all Dharwar, Belgaum, and Bijápur show how completely Vikramáditya ruled tho Decean and Karnatak. One of his most interesting inscriptions is a Buddhist tablet at Dambal which records grants made to a vihára of Buddha and a rihara of Arya Tara Devi at that town. The inscription is dated 1095 (S. 1017) and proves that the Buddhist religion was a living faith in the Kanarese country as late as the end of the eleventh century.1 Vikramúditya's leading underlords and officials in Dharwar were the Kadamba Mahamandaleshvar Kirttivarma II. who in 1076 and 1077 was governing the Banavası Twelve Thousand; the Mahapradhan and Dandnayak Barmdev who in 1077 was governing the Banavasi Twelve Thousand and the eighteen Agrahúras; 2 the Kúdamba Mahámandaleshvar Shántivarma who in 1018 was governing the Banavási Twelve Thousand and the Pánungal Five Hundred; Queen Lakshmudevi who in 1095 was governing the eighteen Agrahárus and Dharmapur or Dharmavolal the modern Dambal; the Kadamba Mahamandaleshvar Tailap II. who in 1099, 1108, and 1115, was governing the Banavási Twelvo Thousand and the Panungal Fivo Hundred; the Mahapradhan and Dandnayak

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Details are given below under Dambal in Places.

The eighteen Agrahdras seem to have been eighteen important towns scattered over the Belvol: Three Hindred district. Hull was one of them, Nargund another, and Dambal was perhaps a third. Fleet's Kanarese Dynastics, 15 note 3; Ind. Ant. XII. 47.

Chapter VII-History. EARLY HISTORY. Western Chalukyas, 278-1190. Anantpál who in 1103 was governing the Belvola Three Hundred. the Puligere Three Hundred, and the Banavasi Twelve Thousand: and the Mahapradhan Dandnayak and Chamberlain Govind who in 1114 was governing the Banavási Twelve Thousand and the Santalige Thousand. Vikramaditya's long reign was fairly peaceful, except that his younger brother Jaysimh IV., whom he had placed as viceroy in charge of the Banavási Twelvo Thousand, rebelled and winning over many local chieftains advanced as far as the Krishns. In a battle fought near the Krishna Jaysimh was made captive and the insurrection was crushed.1 Two of Jaysimh's inscriptions have been found, one at Anantpur in Maisur and one at Lakshmeshrar. The Anantpur inscription records that in 1079 Jaysimh was governing the Banavási Twelve Thousand; and the Lakshmeshvar inscription records that in 1081 Jaysimh was governing the Banavási Twelve Thousand, the Santalige and Kandur Thousands in Maisur, and the Belvola and Puligere Three Hundreds in Dharwar. These inscriptions style Jaysimh heir-apparent. He seems to have died before Vikramaditya VI., whose successor was his own second son Someshvar III. (1126-1138). Inscriptions of Someshvar III. have been found at Abbalur and Hiro-Kerur in Kod and at Bankapur. The Abbalur and Hire-Kerur inscriptions have not been deciphered, but the two Bankapur inscriptions are dated 1138. Someshvar's leading underlords and officers in Dhárwár were the Kádamba Mahámandaleshvar Mayurvarma III. who in 1131 was governing the Banavási Twelve Thousand, the Santalige Thousand in Maisur and the Panungal or Hangal Five Hundred; the Kadamba Mahamandaleshvar Tailap II. who in 1135 was governing the Banavási Twelve Thousand, the Panungal Five Hundred and the Puligere Three Hundred; and the Dandnáyak Mahádev who in 1130 was governing at his capital of Puligere.2 Of Someshvar III.'s eldest son and successor Jagadekmalla II. three inscriptions have been found at Dharwar; one dated 1143 at Hire-Kerur seven miles south-west of Kod. and two dated 1144 and 1148 at Balehalli six miles south-west of Hangal. Jagadekmalla's capital was Kalyan, but in 1148 he appears to have had a provincial centre at Kadalipur3 in the Kondarte Seventy, which was a small sub-division on the Dharwar and North Kanara Frontier near Hangal. Jagadekmalla II.'s chief Dhárwar underlords and officers were the Dandnayak Bomanayya, who in 1143 was governing the Banavasi Twelve Thousand; the Daudnáyak Keshiráj or Keshimayya who in 1142 was governing the Belvola Three Hundred, the Palasige or Halsi Twelve Thousand and the Panungal Five Hundred. Of Jagadekmalla's younger brother and successor Tails III. (1150-1162) inscriptions have been found in Dhárwár at Pura and Hamsabhávi in the Kod sub-division, and at Haveri in the Karajgi sub-The inscription at Pura about three miles south of Rattehalli bears date 1152 and the Haveri inscription is dated 1157.

² Fleet's Kanarese Dynastics, 50.
² Fleet's Kanarese Dynastics, 52.
³ Kadalipur is mentioned in one of the Balehalli inscriptions. It is probably Balehalli as Kadalipur is the Sanskrit translation of the Kanarese Balehalli of Plantain Town.

Taila III.'s leading underlord and officer in Dharwar was the Dandnáyak Mahádev, who, in 1152, was governing the Banavási

Twelve Thousand and the Puligere Three Hundred.

Taila III.'s commander-in-chief was the Mahamandaleshvar Bijjala of the Kalachuri dynasty. As later Kalachuri inscriptions record that Bijiala destroyed the Chalukya kings and acquired the whole of the Kuntal country,1 it is clear that Bijjala abused his trust and used his sovereign's armies to deprive him of his kingdom. An inscription dated 1161-2 (S. 1083) found at Balagámyo in Maisur styles Bijjala Mahámandaleshvar, a second inscription dated 1162-3 (S. 1081) found at Annigeri invests Bijjala with full royal titles and calls Annigeri his royal capital. This fixes the date of Bijjala's usurpation between January 1161-2 and January 1162-3. Of the Kalachuri usurper Bijjal (1161-1167) inscriptions have been found at Ablar and Rattchalli in Kod and at Annigeri in Navalgund. Bijjala's leading underlords and officers in Dharwar were the Dandnayak Barmaras, who, in 1161, was governing the Banavási country; the Dandnáyak Shridhar who in 1161 was governing from Annigeri; and Káshyapnáyak who in 1163 was governing the Banavase Twelve Thousand and the Panungal Five Hundred. Though the Kalachuris were Jams, Bijjala took a great interest in Shaivism. His minister Basava, taking advantage of his master's leaning towards Shaivism, started the Lingayat form of that faith, and securing a large following, dethroned Bijjala and for a time assumed the Fovereignty.3 According to Jain accounts, dreading

the Kirukad Seventy, the Bigadage Seventy, and the Taddevade Thousand. Fleet's Kanarese Dynastics, 42.

The Kalachuricor Kalachuryas have the title of Kalanjara perceivablickeara, that is Supreme lord of Kalanjara the best of cities. The original stock therefore started from that city, now the hill fort of Kalanjar in Bundelkhand. An account published by General Cunningham (Arch. Report, IX, 51) shows that in the much, tenth, and eleventh centuries a powerful branch of the family held Bundelkhand which was also called Chesh. This family seem from their cra, which is called either the Kalachuri or the Cheshera, to date from an early as a to. 240. Their capital wax at Tripura, now Tevar, about eig miles west of Jabalpur. Members of this Tripura tamily of Kalachuryas several times intermarried with the Bishtrakutas and Western Chilulyas. Another branch of the tribe in the sixth century had a kingdom in the Konkan, from which they were driven by the early Chilukya Mangalish, uncle of Pulikashi II. (610-634). The Kalachuryas call themselves Haibayas and claim descent from Yadu through Kartavarya or Saharabahu-Arjuna.

The tub are given in Bombay Genetice, XV. Part II. 30.

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EARLY HISTORY. Kalachuris. 1161-1184.

¹ The country of Kuntal included, on the south, Bulgainse and Haribar in Maisur, and Hange or Vijayanagar in the Beltri district. To the north of these places it included Labahmeshaar, Godag, Labhundi, and Naregal in Physicar, and Kukkanur inche Nichm's dominious; forther to the north, Konnur, Kallole, Sundatti, and Manoh in Belgeim, and Pattadakal and Aihole in South liftpur; and still further to the north, Bijapir, Taldevádi, and Mannugulli, in Bijapir. Still further to the north, it probably included Kalyan itself; but the inscriptions as yet available do not enfine to define its extent in that direction and to the north west. In the south-west corner, it included Banavasi in North Kinari, and Hungal in Dhirwar, and, on the situation are larged to the fixed and the south-west to the fixed and hungal in the Havas Constituted to the hand was found the fixed in the fixed in the fixed fixed to the hand was found the fixed in the fixed fixed to the hand was found to the fixed in the fixed fixed to the hand was found to the fixed in the fixed fixed to the hand constitutions. thraxide, was bounded by the Hayve Pive Hundred, which was one of the divisions interior, was bounded by the Hayle live Hundred, Which was one of the divisions of the Konkin, and which lay between Hingal, Binarasi, and Bilaginre, and the coast. To the north of Hingal, the Palauge or Habi Tweli. Thousand, the Venugetims of Belgium Seventy, and the territory of the Silthiras of Kolhapur, do not see in to have formed part of Kuntila. As they lay along the inland slopes of the Salykdris and were been included immediately on the west by the Konkin, they seem to have been to ited rather as up country discious of the Kenkin itself. The principal divisions of Kuntil were the Branches Twelve Thousand, the Palaula There to add the Ralicia Theorem and the Ral Hundred, the Puligere or Lakhmeshvar Three Hundred, the Belvola Three-hundred, the Kundi Three-thousand, the Toragale Six Thousand, the Kelavadi Three Hundred, the Kirukad Seventy, the Bigadage Seventy, and the Taddevide Thousand. Fleets

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EARLY HISTORY.

Kalachuris,
1161-1184.

the vengeance of Bijjala's son Someshvar, Basavafled to Ulviin North Kanara. He was pursued, and, finding that Ulvi could not stand a siege, he threw himself in despair into a well and was drowned. Of Bijjala's son and successor Someshvar (1167-1174) inscriptions have been found in Dhárwár at Lakkundi and Narsápur in Gadag, at Annigeri in Navalgund, and at Rattehalli in Kod. The Lakkundi and Narsapur inscriptions are dated 1172 and 1173; the Annigeri inscription is dated 1172, and the Rattehalli inscription 1174. Someshvar's Dharwar underlords and officers were the Dandnayak Keshay who in 1168 was governing the Banavasi Twelve Thousand, the Panungal Five Hundred, and the Taddevadi Thousand; the Dandnáyak Tejimayya who was the governor of the Belvola country; and the Mahamandaleshvar Vijayapandya, who in 1174 was governing the Banavási country. About 1175 Someshvar was succeeded by his three brothers Sankama, Ahavamalla, and Singana who seem to have shared the government. Sankama's inscriptions have been found at Ron and Sudi in the Ron sub-division both dated 1180. His chief Dhárwár underlord was the Mahápradhán and Dandnáyak Keshiráj who in 1179 was governing the Banavási country with a subordinate Sampakar of the Gutta family. An inscription of Ahavamalla (1180-83), dated 1182, has been found at Anyeri twelve miles south-east of Ranebennur. The only known inscription of Singhana is a copperplate found at Behatti eight miles north-cast of Hubli. The plate is dated 1183, and records the grant of the village of Kukkanur in the Belvola Three Hundred.

Though usurped for nearly twenty years by the Kalachuris the power of the Western Chalukyas was not destroyed. 1182, taking advantage of the disturbances at Kalyan caused by the struggle between Lingáyats and Jains, with the help of Dandnáyak Barmras, apparently Taila III's governor of Banavasi, Someshvar IV. son of Taila, established himself in the neighbourhood of Banavási and made Annigeri in Navalgund his capital. As Someshvar's inscriptions have been found only at Annigeri in Navalgund, at Dambal and Lakkundi in Gadag, at Hangal Kallukeri and Naregal in Hangal, and at Abbalur in Kod he probably never ruled any large territory. Someshvar IV.'s Dhárwár underlords were the Mahapradhan and Dandnayak Tejimayya, who in 1184 was governing at Dharmapur or Dambal in the Masvadi country; the Dandnáyak Barmras who in 1184 was governing at the capital of Annigeri; the Mahapradhan Keshavbhatt who in 1186 was governing the Belvola Three Hundred; and the Kadamba Mahamandaleshvar Kámdev who in 1189 was governing the Banaváse Twelve Thousand, the Panungal Five Hundred, and the Puligere Three Hundred. The last inscription of Someshvar IV. is dated 1189. Shortly after this the Western Chalukya dominions were divided between the Hoysala Balláls of Dvárasamudra or Halebid in West Maisur in the south and the Yadavs of Devgiri now Daulatabad in the north.

¹ The Lingayats deny the truth of this story, and say that Basava was absorbed into a ling in the temple of Sangameshvar at the meeting of the Krishna and the Malprabha in Bijapur, ten miles north of Hungund.

This division ceased when, about 1210, the whole of the Western

Chálukya dominions passed to the Devgiri Yádava.

Of the Hoysula Balláls, of Halebid in West Maisur the first mention in connection with Dharwar dates as far back as 1137. It occurs in an inscription belonging to the fourth Hoysala king Vishnuvardhan (1117-37), where the excellent Virátkot or Hangal is described as having cried out. Vishnuvardhan's power is said to have extended to Banavási, Pánungal, Halasige, Puligere, and Másvádi in Dhárwár. Vishnuvardhan gained the Halasige district by conquest from Jayakeshi H. (1125) of the Goa Kadambas, and the Danavasi and Panungal districts by the conquest of the Banavasi Kúdamba Tailap II. (1099-1124). These conquests seem to have been short-lived. The first lasting conquest of Dharwar was by the great Hoysala king Ballál II. or Vir Ballál (1192-1211), also known as the conquerer of Hill Forts. His inscriptions in Dhurwar have been found at Satenhalli in Kod, at Benkankoud in Ranebennur, at Annigeri in Navalgund, at Hangal, and at Alavandi, Gadag, Mevundi, Mulgund, and Nagamye in Gadag. Vir Ballal was the first of his family to assume royal titles, and as commander-inchief of his father's army, and by defeating the Kalachuri general Barma in 1183, established Hoysala power in the Kalachuri dominions north of the Tungbladra Vir Ballal seems to have made no lasting conquests north of the Malaprabha. In 1192 he established himself at his capital of Lokkigundi, the modern Lukkundi." Before this, besides defeating the Kalachuris, Ballal met and defeated, according to tradition at Lakkundi, the Devgiri Yadav Jatugi (1183), a victory which gained Ballal the supremacy of the country of Kuntal. An inscription of Ballal's son Narsimh II. describes a battle between Ballál and a certain Seman or Sevan whom Ballal besieged at Soratur near Gadag, defeated, pursued, and slew at the Krishna. In the same campaign besides Scratur, Ballal II. took the hill forts of Eramburgo or Yelburga in the Nizum's country, Kurugod near Belári, and Bellitagge, Gutti, Hangal, and Rattchalli in Dharwar. His first attempt on Panungal or Hangal was in 1196. An inscription on a hero-stone or virgal at Hangal, carved with a lively battle scene, records that in 1196 the Hoysala king Vir Balkil came and pitched his camp at the large

2 Br ides at Lakkundi Ballif II, had a capital at Annigeri.

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LARLY HISTORY. Hoysala Balláls, 11.7-1310.

The Hoyerlan, who are best known as the Hoyerlan of the crossmoden in Maisur, ruled from about 1039 to 1312. Their name is also written Hoysani, Payella and Poyania. They be long to the lineage of Yadu, and reem to be connected with the Yadaxs of Deagir (1189-1312) as they both have the family titles of Yadaxs Nariyan and of Deagir (1189-1312) as they both have the family titles of Yadaxs Nariyan and of Deagar (1189-1312) as they beth have the family titles of Yadaxs Nariyan and of Deagar (1189-1312) as they beth have the family titles of Yadaxs Nariyan and of Deagar (1189-1312) as they beth have the family titles of Yadaxs Nariyan and of Deagar (1189-1312) as they beth have the family titles of Yadaxs Nariyan and of Deagar (1189-1312) as they beth have the family titles of Yadaxs (1189-1312). Desgri (1189-1312) as they both have the family titles of Yadav-Nariyan and of Ivaraanti Puravardibishvar, supreme lords of Diaraanti the best of cities, apparently Diaraantimat, the modern Halchdin West Musur. Vinayaditaya (1039) was the first of the family to occure any considerable share of power. The two chief men of the family to occure any considerable share of power. The two chief men of the family were Vishnuvardiana from about 1117 to 1133, who was independent except in name, and Ballil II. (1192-1211) who overthrew the Kalachuri successors of the Châlukyas and also defeated the Yadava of Diagin. His on Narsimh II. (1233) was defeated by the Yadava, and his gest-grandson Ballila III. by Alachdin's general Malik Katur in 1310. They aretained a second and final defeat from a general of Molemmad Tughdi,'s in 1327. The following are the successions: Vinayaditya (107-1076), Ereyanga, Ballila I. (1103), Vishnuvardibans (1117-1137), Narsimh I., Ballila II. (1101-1211), Narsimh II. (1223), Someshvar (1252), Narsimh III. (1254-1256), and Ballila III. (1310). Theefa Kaarrese Dynastics, 64; compute Wilson's Mackenric Collection, New Edition, 64.

Be idea at Lakkundi Ballid II. had a capital at Annigeri.

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LARLY HISTORY.
Hoysala Baildis,
1157-1210.

Anikere pond to the west of the city and from it laid siege to the city. The stone tells how Sohani and his son Padmayya or Padmann, the leaders of the Kadamba garrison dashed out and routed the assailants, though the victory was marred by the death of the Kadamba leader Sohani. Ballal II. returned and about 1200 succeeded in taking Hangal. Still the Kadamba chief Kander struggled on and in 1203 held Satenhalli in Kod. Ballal II.'s leading underlords and officers in Dhúrwar were, in 1192, the Mahapradhan and Dandnayak Ereyana or Eraga governing the Banavasi Twelve Thousand and the Santalige Thousand; in 1199 the Mahamandaleshvar Rhydev governing the Helvola country; in 1202 the Mahamandaleshvar Jagadala Bhattamdev governing the Kuntol country; and in 1203 his Dandnayak Kamathad Mallisetti governing the Santalige Seventy and the Nagarkhand Seventy in the Banavási country. Ballal's II. son and successor Narsimh II. lost all that his father had won of the old Western Chalukya dominious. Narsimh retired to Dvársamudra and seems never after to have attempted to pass north of the Tungbhadra.

Dergiri Yddars, 1187 - 1320.

Narsimh's rivals and conquerors were the Yadavs of Devgiri in the North Decean. The first mention of the Dovgiri Yadavs in connection with Dharwar is in the reign of the third Devgiri king Bhillum (1187-1191) whose son Jaitagi I., apparently in Bhillam's lifetime, was defeated by Vir Ballal in a battle fought, according to tradition, at Lakkundi in Gadag. As this victory is said to have secured to Ballal the country of Kuntal, Bhillam must have then held a fairly extensive kingdom including Dharwar. One of Bhillam's inscriptions, dated 1189, at Annigeri in Navalgund speaks of Annigeri as the capital from which his underlord the Mahamandaleshvar Báchiráj or Báchan was governing the Belvola country. Of Bhillam's grandson Singhan II. (1209-1247) inscriptions have been found in Dharwar at Gadag, Lakshmeshvar, Chaudadampur, and Rattchalli, and a copperplate at Haranhalli on the Tungbhadra in Ranebennur. In 1215 Singhan's Mahapradhan Hemmayyanayak was the manager of the customs duties of the Banavási country; in 1219 Singhana Il. held the whole of the Banavase Twelve Thousand; in 1223 his Dandnayak Jagadal Purushottam was governing the Torgal Six Thousand; in 1241 his Mahapradhan Lakshmipal was governing the Nagarkhand Seventy; and in 1247 his Mahapradhan and Sonapati Bachiraj was governing the Kurnatak and other countries from the capital of Pulikarnagar or Lakshmeshvar. Of Singhan's grandson Krishna (1247-1253), inscriptions have been found in Dharwar at Behatti, Chaudadampur, Gadag, and Nagamve. Of Krishna's successor Mahadev (1260-1270) inscriptions have been found at Chaudadampur. Pura, and Saugur. Of Mahadev's nephew and successor Ram-

¹The Devgiri Yadavs (1150-1312) were a dynasty of ten powerful kings who held almost the whole of the Deccan before the Musalman conquest. Their capital was originally at a place called Tenevalage, then at Vijayappur or Bijappur the great Adilshahi capital, and afterwards at Devgiri the modern Daulatabed in the Nizam's territories. Their greatest king was the ninth Ramchandra or Ramdev (1271-1310), in the latter part of whose reign the Musalmans first invaded the Deccan.

chandra or Ramdev (1271-1310), the greatest of the Devgiri Yadavs, inscriptions have been found in Dharwar at Chaudadampur, Lakshmeshvar, Naregal, and Rattchalli. In 1277 Ramder's underlord was the Mahamandaleshvar Saluva Tikkama who had come to Harihar on the Dharwar-Maisur frontier in the course of a victorious expedition to the south. This expedition had probably been directed against the Hoysalas in consequence of their threatening, or perhaps invading, the southern and south-western part of Ramdev's dominions. In a 1277 inscription Saluva Tikkama is called the establisher of the Kadamba kings and the overthrower of the Hoysalas. In 1295 Ramdev's Mahapradhan Mallidev was governing the Pulikere or Lakshmeshvar Three Hundred.

Besides of these different overlords inscriptions record the names of two local families the Kádambas and the Sindas. With varying overlords, the Kádambas of Banavási and Hángal (1068-1203) were during the eleventh and twelfth centuries the local rulers of Dharwar. Their copperplates and inscriptions give about twentyfive names of whom six appear to have actually governed.1 All that is known of these Kadambas has been given in the account of

their Western Chalukya overlords.

During the greater part of the twelfth century (1100-1180) the north-east of Dharwar was held by the Sindas of Erambarge or Yelburga in the Nizam's country about fifteen miles east of Naregal in North-East Dharwar. Of two of them Achugi II. (1110-1122) and Permadi I. (1104-1144) inscriptions have been found at Kodikop. Naregal, Ron, and Sudi all in the Ron sub-division. Achugi II.'s inscriptions found at Kodikop ten miles south of Ron is dated 1122. He was then governing the Kisukad3 or Pattadkal Seventy and several other towns, the chief of which was Nareyangal-Abbegeres the chief town of the Nareyangal Twelve and a part of the Belvola Three Hundred. Of Achugi's eldest son and successor Permadi I. (1104-1144) three inscriptions have been found at Naregal and one at Kodikop. Of the Naregal inscriptions two record grants made by village officers before his time. The third is of his own time and hears date 1101. The Kodikop inscription is dated 1144.5 Till 1294 Ramchandra of Devgiri (1271-1310) was supreme in the Karnatak.c

In 1291 Alá-ud-din the nephew of Jelál-ud-din the first Khily emperor of Delhi (1288-1295) led the first Musalman army that had ever passed into Southern India, took Dovgiri, and compelled Rámchandra or Rámdev to acknowledge the supremacy

Details of the Sindan are given in the Bijapur Statistical Account.

* Fleet's Kanaroue Dynasties, 71-

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CARLY HISTORY. Dergiri Yadars. 1187-1320.

> Kadambas. 1058 - 1203.

Sındas. 1100 - 1180.

¹ The Kadamba successions are Mayurvarma I., Krishnavarma, Nagvarma I. Vishnuvarma, Mrigvarma, Satyavarma, Vijayvarma, Jayvarma I., Nagvarma II., Shantivarma I., Kirttivarma I., Adityavarma, Chattaya Chatta or Chattuga, Jayvarma II. or Jaysinh, Kirttivarma II. or Kirttidev I. (1003-1131), Mayurarma II. Shanta or Shantaya (1088), Taila II. or Tallapa II. (1093-1131), Mayurarma III. (1131), Mallikarjun I. (1132-1135), Kirttidev II., and Kamdev (1181-1203) Soveral other Kadamba names, which, though historical, do not fit with this last are given in Mr. Pleet's Kanareso Dynastics, 87-88. *Socabove, pp 391-398.

*The mane Kisukad or Ruby forest, though not now known, evidently marked the country round Kisuvolal or Ruby-city that is Pattada Kisuvolal or Pattadalal in South Bijápur. *The modern Naregal about ten miles south-east of Ron. *Details of the Sindan are given in the Britpur Statistical Account.

Chapter VII. History. THE DELMI

EMPERORS,

1294 - 1347.

of the emperors of Delhi. Between 1295 and 1306 Ramchandra remained unharmed and continued the everlord of the south. In 1806 Ala-ud-din, who in 1295 had usurped the Delhi throne, again sent an army to the south under his general Malik Kafur and again reduced Ramchandra to submission.2 Ramchandra died in 1310 and his son Shankar was ill-affected to Musalmans. In the same year (1310) Alá-ud-din's generals Malik Káfur and Khwája Háji passed south, Inid waste the Hoysala kingdom, captured Ballala III. (1290-1310), and, after plundering his capital of Dvarsamudra, returned to Delhi with rich spoils.3 In 1312 Malik Kafur entered the Deccan for the fourth time, seized and put Shankar the Devgiri king to death, and laid waste the Karnátak and Maháráshtra from Cheul in Rolába and Dábhol in Ratnágiri in the west as far east as Mudgal and Ráichur in the Nizam's territory. The country north of a line passing through Belgaum and the meeting of the Krishna and Tungbhadra was brought completely under the sway of the Delhi emperor. During Malik Kafur's absence at Delhi Harpal, the son-in-law of Ramchandra of Devgiri, stirred the Deccan to arms and restored the former Devgiri territories to independence. The troubles at Delhi resulting in Alú-ud-din's and Malik Kafur's assassination left Harpal in undisturbed possession of Devgiri till 1318. In 1318 the emperor Mubárik (1317-1321) marched into the Deccan, captured Harpál, and flayed him alive. In 1927 the emperor Muhammad Tughlik (1325-1351) subdued the Karnátak even to the shore of the sea of Uman that is the Indian Ocean. Of the forty years between the first Musalman invasion of the south in 1294 and the establishment of a new Hindu kingdom at Vijayanagar between 1328 and 1335 no record has been traced. It must have been a time of trouble and disorder, favourable to the rise of the petty robber chiefs, who, when the central authority was weak or broken, always divided and harried the Karnátak. Between 1328 and 1335, with the help of the Shankaracharya of Shringeri in West Maisur, two brothers, Hakka and Bukka, established a new city on the right bank of the Tungbhadra river, opposite the old city of Anegundi and about thirty-six miles north-west of Belari. The new city was first called Vidyanagar or the City of Learning, and afterwards Vijayanagar or the City of Victory. Of the origin of the two brothers Hakka and Bukka accounts vary. According to one story they belonged to the Hoysalas of Dvárasamudra, according to a second they were of the family of the Banavasi Kadambas, according to a third they were of the Yadav line, and according to a fourth they were shepherds or Kurubars the treasury guards of the family of Varangal in the Godávari delta which was destroyed by the Musalmáns in 1323. Madhav the head of the Shringeri monastery helped the brothers with money, chose for them the site of the new city, and, in 1335. when the fortifications were completed, placed Hakka on the throne with the title of Harihar Ray (1835-1350). The spread of Vijayanagar

Vijayanagar, 1335 • 1344.

Briggs' Feriahta, I. 307.
 Briggs' Feriahta, I. 375.
 Brigge' Feriahta, I. 389.

<sup>Briggs' Ferishta, I. 369.
Briggs' Ferishta, I. 379.
Briggs' Ferishta, I 413.</sup>

power in the Karnátak was rapid. In 1342 the Arab traveller Ibn Batuta found Hariab, that is Hariappa, the overlord of the chiefs of the Kanara coast. Thus, at this time, Dharwar seems to have been held by Vijayanagar. While Vijayanagar was building, Muhammad Tughlik (1325-1351), pleased with its central position and the strength of its hill-fort, was trying to make Devgiri, or as he now called it Daulatabad the City of Wealth, the capital of India. He thrice forced the people of Delhi to move to Danistabad, but all his efforts failed. The Deccan continued hostile to his rule. And in the troubles which embittered the latter part of his reign the Deccan nobles more than once rose in revolt. At last in 1317, under the leadership of an Afghan named Zaffir Khan, afterwards known as Alá-ud-din Hasan Gangu, who took the name Bahmani out of respect to a Brahman patron, the Deccan freed itself from all connection with Upper India. Hasan moved his capital from Daulatabad about 190 miles south-east to Kulbarga and there founded a dynasty, which, under the name of the Bahmani or Kulburga kings, ruled the Decran and great part of the Karnatak for nearly a century and a half (1347-1489).

About 1351 Alá-ud-din Hasan Gangu (1347-1358), the founder of the Bahmani kingdom, sent a large force into the Karnatak or Kanarese-speaking districts, that is the country south of a line drawn between Kolhapurand Bidar. From the Karnatak the Bahmanigeneral returned with much spoil in money and jewels, besides two hundred elephants and one thousand female singers.2 Very bloody wars continued between the Vijayanagar and the Bahmani kings, the record of which is probably one-sided, as Ferishta dwells on Musalman victories and passes over Musalman defeats. In the earlier wars between Kulburga and Vijayanagar, it is recorded that victory was always followed by a general slaughter of prisoners, men women and children. In spite of their reverses the Vijayanagar kings do not seem to have lost their hold on Dharwar and its neighbourhood, as, from an in-cription dated 1351-55 (S. 1276). Harihar, on the right bank of the Tungbhadra about twelve miles south-east of Ranebenuur, belonged to Bukka the second Vijayanagar king (1350-1379)3. In 1369, Muhammad Shah Bahmani (1358-1375) defeated Bukka, king of Vijayanagar, and continued for three months to massacre the people of the Vijayanagar territory Muhammad was more successful than his predecessors in reducing the Karnátak chiefs and landlords. He wrested from them much of the accumulated riches of seven hundred years," and so reduced the population that according to Perialita the Vijayanagar districts did not recover for several ages. The scene of these indiscriminate mareacres was the Raichur-Doah outside Dharwar limits, though the east of the district can hardly have escaped.

The weakening of Vijayanagar power and the cruelty of the Musalman invaders forced large numbers of the people into outlawry. They

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THE BAUMANIS, 1347 - 1489.

> Wars with l'yayanngar, 1559.

Yulo's Cathay, H. 416.
 Jahriggs' Perishta, H. 201.
 Jahriggs' Perishta, H. 301.
 Briggs' Perishta, H. 316.
 Briggs' Perishta, H. 327.
 Briggs' Perishta, H. 327.

Chapter VII. History. The Bahmanis, 1347 - 1489. Wars with V nayanagar, 1375-1417.

formed into large bands of brigands, and during Muhammad's reign as many as eight thousand heads are said to have been sent to Kulbarga and piled near the city gates.1 Muhammad Shah's successor Mujahid Shah (1375 - 1378) demanded from Vijayanagar the fort of Bankapur, about thirty-six miles south of Dharwar, together with other places between the Krishna and the Tungbhadra, a country which Ferishta describes as full of fastnesses and woods.2 Bukka refused and in the war which followed was driven through the forests to Cape Rámas in Goa. Then fortune changed; Bukka regained what he had lost, and forced the Musalmans out of the territories to the south of the Krishna. An inscription dated 1379-80 at Dambal in Gadag shows that at that time Haribar II. (1879-1401) of Vijayanagar held Gadag.³ The success of the Vijayanagar chief was apparently decisive, as the Musalmán historians record about twenty years of peace during the reigns of Mahmud Sháh Bahmani (1379-1397), Gheiás-ud-din (1397), and Shams-uddin (1397), from 1378 to 1397. This period of peace was followed by a devastation as complete as that caused by the fiercest Musalmán invasion. The great Durga Devi famine began in 1396 and lasted twelve years. Whole districts were emptied of their people, and the hill forts and strong places previously held by the Muhammadans fell into the hands of petty chiefs and leaders of bandits.4 A second inscription of Harihar II., dated 1399-1400 (S. 1321), is at Makaravalli in Hángal.

War between the Bahmani and Vijayanagar kings again broke out in 1398. In 1406 Feroz Shah Bahmani (1397-1422), halting near Vijayanagar, detached Mir Fazl Ulla Anju with the Berár division to lay siege to Bankapur the most important fortress in the Karnátak. Mir Fazl Ulla succeeded in taking the fortress. He committed the government of the fort and of its valuable dependencies to Mia Saddoh, and himself returned to the royal camp. the treaty which followed Dev Ráya (1401-1451) of Vijayanagar agreed to give his daughter in marriage to Feroz Shah Bahmani, and, to prevent further disputes, to cede the fort of Bankapur as the marriage portion of the Vijayanagar princess.6 The peace between the rival kingdoms did not last long. In 1417 they were again at war. And in 1423, Ahmad Shah Bahmani (1422-1435), the successor of Feroz Shah, overran the Vijayanagar country, and put to death men women and children without mercy. Whenever the number of the slain amounted to twenty thousand, Ahmad Shah halted three days and made a festival. He also broke down Hindu temples and destroyed Brahman colleges." Still, in spite of these successes, the Musalmans had no firm hold of the country south of the Krishna. 1423 and 1425 were years of drought and famine.8

In 1443, hearing that Dev Ráya of Vijayanagar had sent his son

<sup>Briggs' Ferishta, II. 325.
Jour, Bom, Branch Roy. Soc. XII. 338.
Grant I Jour. Bom. Branch Roy. As. Soc. XII. 340.
Briggs' Ferishta, II. 384; Scott's Doccan, I. 85 - 86.
Briggs' Ferishta, II. 402.
Briggs' Ferishta, II. 402.</sup> ² Briggs' Ferishta, II. 337. 3. Grant Duff's Maráthás, 26.

⁸ Briggs' Ferishta, II. 405.

to besiege Bankápur, Ahmad Sháh Báhmani despatched Malik-ul-Tujár with the Daulatabad division to oppose him, and the Vijayanagar troops were forced to raise the siege. In 1454, Navalgund, about twenty miles north-east of Dharwar, which is mentioned as the head-quarters of a sirkar or province, was the scene of an attempted revolt. Jelál Khán the governor of the province and brother-in-law of Ala-ud-din Bahmani II. (1435 - 1457), taking advantage of the king's illness, seized a large tract of country round Navalgund which he gave in charge to his son Shikandar Khán. In spite of his illness Alá-ud-din marched against the rebels who fled before him. Shikandar Khan induced Sultan Mahmud Khilji of Málwa and the ruler of Khandesh to enter the Deccan with a large army. Against this force Alá-ud-din marched in person, but before the armies met Shikandar's allies withdrew as they had moved on the assurance that Alá-ud-din was dead. With two thousand Afgháns and Rajputs Shikandar fled to Navalgund. Khwaja Mahmud Gawan pursued him, besieged Bankapur, and on a promise of pardon persuaded him to surrender. On going to court he was received into favour, and in 1455 Navalgund was restored to him. In 1437, on the accession of the new king Humáyun Sháh (1457-1461), disappointed at not receiving the government of Tailangana, Shikandar and his father began to raise troops at Navalgund, and defeated Khan Johan the governor of Berar who was sent against thom. After Khan Jehan's defeat the king marched against the rebels, in the hope of inducing them to submit. But Shikandar Khan, relying on the attachment and bravery of his troops, with eight thousand Deccanis and Rajputs marched out to offer battle, and by night surprised the king's camp with success. In consideration of their close relationship and former friendship the king sent Shikandar word that in spite of his crime in appearing in arms against his sovereign, if he would surrender, he would grant him a free pardon and confer on him an estate To this Shikandar Khan returned an insolent in Daulatabad. Humayun ordered the line to attack, and Shikandar repeatedly repulsed the vigorous charges of the royal army. The action remained uncertain, till Mahmud Gawan with the Bijapur division and Khwaja Jehan Turk with the army of Tailangana at the same time charged Shikandar's right and left wings and the rebels began to give way. The king, observing their confusion, supported the attack from the centre with five hundred bowmen and five hundred spearmen, at the head of whom, mounted on an elephant, he charged the enemy. His advance was so stoutly opposed that the king found himself nearly deserted by his followers who retreated in confusion, while Shikandar Khan headed an attack on the king. As Shikandar drew near, the elephant on which Humhyun was mounted soized him with his trunk, dragged him from his horse, and dashed him on the ground. His followers unable to check themselves, in their charge rode over him and crushed him to death. On the loss of their leader the rebel army Chapter VII.

THE BAHMANIS, 1347 · 1489. Rebellion at Navalgund, 1456 · 1467.

¹ Briggs' l'erishta, II, 433; Waring's Marathas, 20.

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fled; and the king, rallying his troops, pursued the fugitives with Navalgund, to which Shikandar's father had great slaughter. rotired, was besieged. At the end of a week Jolal Khan submitted. His life was spared, but he ended his days in close confinement! About this time, perhaps in the troubles which accompanied Shikandar Khan's revolt, Vijayanagar succeeded in regaining Bankapur,2 In 1470 Mahmud Gawan, who held the office of prime minister as well as the government of Bijapur, attacked the senboard territories of the Vijayanagar king and took Goa. In 1472, at the instigation of the Vijayanagar king, the Hindu chief of Bankapur and Virkam Ray Raja of Belgaum sont troops to retake Gon.3 The attempt failed, and, in retaliation, the Musilmans besieged and took the fort of Belgaum. In 1472 and 1473 no rain fell, and no grain was sown; many died and many left the country. In the third year, when rain fell, scarcely any farmers remained to till the land.4

Bijaper Kings 1453-1686.

The capture of Belgaum and its dependencies brought the whole of the Bombay Karnatak, except the southern portion of Dharwar, under Musalman rule. But the ascendancy of the Bahmanis was now at an end. In 1489, Yusuf Adil Shah, one of the leading nobles of Mahmud Shah Bahmani II.'s court, declared himself in dependent and seized Bijapur and all the Bahmani possessions in Dharwar. About ten years before the establishment of Bijapur power (1479), perhaps from the want of success of the last of its members, Mallikarjuna (1451-1465) and Virupaksha (1465-1479) the first dynasty of Vijayanagar kings came to an end. Narsingh, who according to one account was the slave of the last king Virupiksha, according to a second account was a chief of Tailingans, and necording to a third account was of a Tulay or South Kanara family, established himself at Vijayanagar. In 1508, Narsingh of Vijayanagar was succeeded by his son Krishna Raya, a most successful and longlived king, who continued to rule probably till 1531. Krishna seems to have owed much of his success to the friendship of the Portuguese, who, arriving on the Malabár const in 1498, wagod a naval war on Arabs, Turks, and all Musalman Their rivalry with Bijapur induced them to cultivate friendly relations with Vijayanagar whom they supplied with ammunition, horses, and artillerymen. In 1510, Yusuf Adil Shah, the founder of the Bijapur dynasty, died. Acting under the advice of their Hindu ally the chief of Honavar in North Kanara, the Portugueso suddenly attacked Goa and took it with little trouble. It was recovered by Bijapur in May of the same year, but before the close of 1510 (November 25th) was again taken and permanently held by the Portuguese.5 The success of the Portuguese was most welcome to many of the Hindu chiefs. In 1512 au embassy came to Dalboquerque from Vengapur, that is Bankapur, to congratulate him on his success at Goa. The ambassadors brought sixty beautifully

¹ Brigge' Ferishta, II. 447. 456; Scott's Decean, I. 130-136. ² Compare Brigge' Ferishta, II. 491. ³ Brigge' Ferishta, II. 491. ⁴ Brigge' Ferishta, III. 491. ⁵ Brigge' Ferishta, III. 31.

dressed horses and asked that they might have the management of the lands of Goa and that they might have 300 horses a year. Dalboquerque gave them the horses, because their chief was a useful ally as his land was a veritable and safe road to Vijayanagar, and as his people were skilful saddlemakers.1 About 1520 Krishna Ráya completely defeated Ismáil Adil Sháh (1510-1534) and restored the kingdom of Vijayanagar to its former limits.2 The absence of any Musalmán successes for several years after Krishna Raya's victory may be gathered from Ferishta's narrative, which passes in silence over the sixteen years between 1520 and 1535. Among the people of Dhárwár the rule of Krishna Ráya and his brother Achyuta Raya, for the two names always go together, is remembered as a time of happiness and ideal government. Though, as the best known members of the dynasty, Krishna and Achyuta have probably gained a traditional credit for works which were not theirs, the brothers seem to have had a great share in constructing the system of water works for which Dharwar and the neighbouring country are famous. They also seem rightly to have the credit of introducing the Rái Rekha Már survey which formed the basis of all later revenue settlements.3 The only one of Krishna Ráya's inscriptions found in Dhúrwar is a copper-plate grant dated 1512-13 (S. 1434), giving over the village of Tirmalapura to Timmanaya the son of Ghatika-Narsingh the astrologer of Rattehalli and Kod.4

After the death of Krishna Raya which probably happened in 1534, Achyuta Ráya scems to have gone on reigning till 1542. Three inscriptions of Achyuta Raya have been found within Dharwar limits, two at Gadag, and one at Annigeri. All are dated 1538-39 (S. 1460). After Achyuta Raya's death, though he kept representatives of the old family as the nominal heads of the state, the real control was seized by Ram Raja, who is said to have been the son of Krishna Ráya's minister. Rám Rája was an able and a vigorous ruler. In 1547 he made a treaty with Dom João de Castro the Portuguese viceroy, with the object of encouraging trade and of resisting the power of Bijápur. In this treaty Hubli or Obeli is mentioned as a

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BIJAPUR KINGS, 1489-1686. Success of

Vijayanagar, 1520.

¹ Commentaries of Dalboquerque, III. 246, 247.

² Rice's Mysore, I. 230. Of this great victory the Portuguese historian Faria-y-Souza (Kerr's Voyages, VI. 179), probably from Vijayanagar sources, gives the following details: In 1520, Krishna Ráya, king of Vijayanagar, collected 35,000 horse, 730,000 foot, and 586 elophants with 12,000 water-carriers and 20,000 dancing-girls, to recover the great castle of Rachol, that is Ráichur, which Bijápur had taken from him. Adil Sháh came to relieve Ráichur, but was defeated and forced to fly, forty Rachardes is his carry fighting with great valour. Eviden Bára proceed the signal of the carry fighting with great valour. him. Adil Shah came to relieve Raichur, but was defeated and forced to fly, forty Portuguese in his army fighting with groat valour. Krishna Raya prossed the siego but with no success, till Christopher de Fiquerede and twenty Portuguese came with horses. Fiquerede asked the king if he might attempt to assault the fort. Krishna Raya agreed, and, the second assault being well backed by the Vijayanagar troops, was successful. Soon after Adil Shah sent an embassy to Krishna Raya, asking for the restoration of prisoners and plunder. Krishna Raya agreed on condition that Adil Shah would acknowledge his supreme authority as emperor of Kanara and come to kiss his foot. This degrading condition was accepted but its performance was delayed. Meanwhile Ray de Melo, who commanded in Goa, taking advantage of the decline of Bijapur power, took part of the country near the isle of Goa.

1 Captain, afterwards Sir G. Wingate in Bom. Gov. Sci. CLV. 74-75.

2 Trans. Bom. Branch Roy. As. Soc. XII. 342.

Chapter VII. History. Budrun Kinos, 1489-1686. Overthrow of l'ijayanagar, 1665.

Siege of Bankapur, 1575.

place of trade in saltpotre and iron for the Bijapur country.1 Though able and successful, Ram Raja was so overbearing to his Musalman neighbours that the four Musalman powers, Bijapur Golkonda Ahmadnagar and Bidar, joined in a league against him. In 1505, at the great battle fought on the banks of the Kriehna, eighteen miles south of Talikoti in the Muddobihal sub-division of Bijapur, Ram Raja was defeated and slain, and Vijayanagar taken and Jealousy between Ahmadnagar and Bijapur, the two leading Musalman powers, prevented the transfer of the Vijayanagar territories to Musalman rule. Ram Raja's brother was allowed to hold much of the Karnatak and for some time many Vijayanagar foudatories maintained their independence.3 In 1570 the feeling of rivalry between Ahmadnagar and Bijapur grow less keen. With the Kalikat chief they formed a great alliance against the Portuguese, and agreed that if successful Ahmadnagar should keep the north Portugueso possessions and Bijapur overrun the south. The splendid courage of the Portuguese defenders of Chenl and Gon defeated the efforts both of the Ahmadangar and of the Bijapur armies.4 Still the alliance led to a more friendly feeling between Ahmadnagar and Bijapur, and in 1573 Ali Adil Shah (1557-1579) the Bijapur king was able to arrange that while Ahmadnagar spread its power northwards, he should be left free to conquer the Karnatak. In 1573 he marched against Dharwar, one of the strongest forts in the Karnátak, which was held by an officer of the late Ram Raja who had assumed independence. The fort fell after a siege of six months and the surrounding country was annexed to Bijapur. The Bijapur king next marched against Bankapur, the capital of Velapa Raya, formerly a servant of the Vijayanngar kings, but now independent. After vain appeals for help to Venkatadry the brother of his former master, Volapa Raya defended himself with such vigour that he nearly forced the Bijapur troops to raise the siege. The Musalmans were specially annoyed by night attacks from the Karnatak infantry, who, valuing their lives but little, entered the tents at night naked and covered with oil and stabbed the Musalman soldiers in their sleep. This novel form of attack caused a panic among the Musalmans and their sufferings were increased by the activity of the enemy in cutting off their supplies. But in Mustapha Khan the Bijapur army had a good commander. With the help of his Bergi, that is apparently Badagi or northern that is Marátha-Telugu cavalry, he reopened his lines of communication, and by placing a strong guard of sentries round the camp checked the night attacks. The siege was pressed, and after a year and three months the Musalmans were rewarded by the surrender of Bankapur.6 The Bijapur king ordered a superb temple within the fort to be destroyed, and himself laid the first

¹ Subsidios, II. 255, 257,′ 2 Briggs' Ferishta, III. 126.

Briggs' Ferishta, III. 131.

Briggs' Ferishta, III. 621, 623; Paria-y-Souza in Kerr's Voyages, VI. 423;

Briggs' Ferishta, III. 147-48; Waring's Marathas, 40.

stone of a mosque which was built upon the foundation. Many towns and districts were conferred upon Mustapha Khán, and till his assassination in Bankápur in 1579 the whole of the conquered country remained under his management.1 According to Hindu accounts the power of the Vijayanagar kings continued at least in name till 1584. Though in 1593 the Hindus for a time regained Bankápur,2 1575, the year of the fall of Bankápur, may be taken as the date when Dhárwár came under Bijápur rule. It continued under their sway for about a hundred years, till the capture of Bijápur by the Emperor Aurangzeb in 1686. Of these hundred years almost no details are recorded. But compared with the ten years of no-government before it began and the hundred and twenty years of misrule after it ended, the Bijapur rule seems to have been a time of fair government and of prosperity. latter part of the seventeenth century, before Bijápur was weakened by the attacks of Shivaji, Dharwar seems to have been full of villages of weavers and Hubli to have been a place of much wealth and of great trade. In 1673, while ravaging Bijápur territory, a Marátha army under Anaji Dattu plundered the rich mercantile town of Hubli, the centre of a number of manufacturing villages. The booty exceeded any previous Marátha plunder. Merchants of all nations were pillaged; and the Bijapur troops, which had been stationed for the defence of the town, destroyed any property which the Maráthás had left. The English factory at Kárwár, which was said to have employed 50,000 weavers in the Dharwar villages, had a broker at Hubli to sell all kinds of imports and gather the cloth intended for England. The Hubli factory was plundered, and, according to English account, goods were lost worth about £2773 (7894 pagodas). The English claimed compensation, but Shivaji declared that, except some petty damage represented by him at about £70 (200 Ps.), his troops had done them no harm. In 1674 Shivaji fortified Nargund thirty miles north of Dharwar, and took Dhárwár. 4 About the same time (1673) Abdul Karim Khán, the ancestor of the present Nawab of Savanur, on behalf of Bijapur, was appointed chief captain against the Maráthás and governor of the province or sarkár of Bankápur, which, under Bijápur, included sixteen districts or parganás, the chief among them being Nasrabad or Dhárwár and Gadag.⁵ In 1685, Sultán Muázzim, Aurangzeb's son, marched in the name of the Delhi emperor to regain the southwest portions of the Bijápur kingdom which Shiváji had overrun. He took Hubli and Dhárwár, a place of respectability and strength, and placed garrisons in them. But in spite of this success he had to withdraw towards Ahmadnagar, as his army was greatly reduced by famine and pestilence. In (1686, 15th October), on the capture of Bijápur by Aurangzeb, the rest of the Bijápur territories in Dhárwár

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BIJÁPUR KINGS, 1489-1686.

> Sack of Hubli. 1673.

Fall of Bijápur. 1686.

Briggs' Ferishta, III. 135-139; West's Southern Maritha Country, 11-12.
 Briggs' Ferishta, III. 180.
 Orme's Historical Fragments, 34-36, 208; Grant Duff's Maráthás, 115.
 Stokes' Belgaum, 42; Bom. Gov. Sel. CXIII. 173
 Orme's Historical Fragments, 286; Stokes' Belgaum, 42.
 Grant Duff's Maráthás, 148; Stokes' Belgaum, 43; Orme's Historical Fragments, 144; Moor's Narrative of Captain Little's Detachment, 42.

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Sivanur Nawib,

1700.

passed to the Moghals. The Moghal tenure of the country was purely military and did not last long. Abdul Rahuf Khan, son of Abdul Karim Khán, the Bijápur governor of Bankápur, entered the emperor's service and received a large share of the Bombav Karnátak. Abdul Ráhuf at first made his head-quarters at Bankápur. but he afterwards moved to Sávanur about six miles to the north-east. He left the revenue management of his territories to the hereditary Hindu officers, of whom the chief were the desais of Navalgund, Shirhatti, Havanur, and Dambal. The death of Aurangzeb in 1707 led to the establishment of two Maratha principalities under two of Shiváji's grandsons, Sátára under Sháhu and Kolhápur under Sambháji. In 1719 through the influence of the Syeds who deposed the Emperor Ferokshir (1713-1719) Shahu received three imperial grants for the chauth or one-fourth and the sardeshmukhi or one-tenth of the revenues of the six Deccan provinces, among them Bijapur which included Dhárwár. The third grant was the svaráj or home rule of sixteen districts, the only one of which within Dharwar limits was Gadag. After this great cession of territory Fatesing Bhonsle, Rája of Akalkot about twenty-three miles south-east of Sholápur. was appointed to collect the tribute and revenue due from the Karnátak. In 1723 the Nizám was created vicercy of the Deccan and assumed independence. In those parts of the Bombay Karnátak which were not included in the Marátha home-rule or svaráj, or had not been wholly ceded in grant, the Nizám divided the revenue with the Maráthás. As viceroy of the Deccan he interfered to suppress disturbances in the Bijápur Karnátak, and . appointed a new governor or subhedár to that district.3 Though Shahu had received the imperial grant of a large share of the Karnátak, and though his claims to levy a fourth and a tenth of the revenues of all lands formerly held by the Moghals had been admitted, so great was the local power of the chiefs of Kolhápur and Savanur that Fatesing Bhonsle, the Maratha general, scarcely ventured to cross the Krishna. In 1726, on the pretext of levying his one-fourth and one-tenth shares of the revenue. Peshwa Bájiráv (1720-1740), with a large army under Fatesing Bhonsle, marched into the Karnátak. They plundered as far as Seringápatam, but made no attempt to establish their power.4 1730, under a treaty between the chiefs of Satara and Kolhapur, though Shahu and the Peshwa continued to exercise sovereignty over it except some forts, the country between the Krishna and the Tungbhadra was assigned to Kolhapur. During these changes the Savanur Nawab, who, though no longer dependent on the Moghals, was subordinate to the Nizam, acquired so large a territory that in 1746 he ventured to resist the authority of the farmer of the Marátha dues from the country between the Krishna and the Tungbhadra. This brought on him a Maratha invasion against which he was unable to cope. In 1747 he had to agree to a treaty by which he vielded to the Peshwa the whole of the present sub-divisions of Dhárwar, Navalgund, and Gadag, and parts of Ranebennur and

¹ Stokes' Belgaum, 44.

² Grant Duff's Maráthán, 210, 250.

² Grant Duff's Maráthás, 200. ⁴ Grant Duff's Maráthás, 218.

Kod. He was allowed to keep Hubli, Bankapur, Hangal, and other districts together with his family possession the fort of Bankapur.¹ It is doubtful whether the terms of this treaty were fully carried out. In 1755, while Peshwa Báláji's army was encamped on the north bank of the Krishna on its march to the South Karnátak, an officer of the Peshwa, formerly in M. Bussy's service, deserted the Peshwa and joined Abdul Hakim Khan the Nawab of Savanur. who had about this time thrown off his allegiance to the Nizam. The Peshwa demanded the deserter's surrender, and as the Nawab refused to give him up, the Maritha army crossed the Krishna, and attacked Savanur. The prime minister of Haidarabad, who was at this time in league with the Peshwa, observing soformidable an advance of Marátha troops, gathered an army of observation. The Peshwa sent agents to declare that he had no intention to make war on the Nizam, that the object of his advance was to reduce the Nawab of Savanur their common enemy whose power, he said, was formidable both to the Nizam and to the Marathas, and if not crushed would spread over the whole Karnátak.2 Accordingly a force from Haidarabad joined the Maráthás, and, under Bussy's directions, the artillery opened so heavy a fire on Savanur that after a siege of three months the Nawab was obliged to yield.3 To secure the withdrawal of the Marátha troops, the Nawab, in addition to a large cash payment, to raise which he was forced to pledge Bankapur fort to Holkar, was compelled to cede eleven more districts, among them Hubli and Misrikota. In return he received some districts in Ránchennur and the sub-division of Parasgad in Belgaum. The Peshwa seems not to have taken the newly acquired territory under his direct management, but to have left most of it to the local desais whom he made responsible for the revenue.

In 1762 Haidar Ali deposed the Hindu king of Maisur and usurped the sole authority. By 1763 Haidar's conquests had spread far north of the Tungbhadra. The friendship of Sávanur became of importance to Haidar, and, through his general Fazl Ulláh, he suggested to the Sávanur chief Abdul Hakim Khán the advantages of an alliance. Next year (1764), as the Savanur chief refused to separate from the Marathas, Haidar marched against Savanur, and, after some resistance, reduced the Nawabto submission, while Fazl Ulláh Khán took Dhárwar and overran the country as far north as the Krishna. In Poona great preparations were made to repel Haidar's invasion. An army under Peshwa Mádhavráo (1762-1773) marched towards the Krishna. Gopálráo Patvardhan, who was sent in advance, crossed the Krishna but was defeated by Fazl Ullah. In May 1764, when the Peshwa approached with an army of 30,000 horse and as many foot, Fazl Ulláh, leaving a strong garrison in Dhárwár, fell back on Haidar's army, which, quitting its

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THE PESHWAS, 1752-1776.

War with Haidar. 1764-65.

Grant Duff's Maráthás, 330; Wilks' South of India, I. 459.

¹ Stokes' Belgaum, 46; West's Southern Marátha Country, 22.

² Grant Duff's Maráthás, 287, 292; Orme's Military Transactions of the British in India, 1, 425-427; Transactions in the Marátha Empire (1803), 67.

³ The artillery practice during this siege so astonished the people that the year when one and a quarter ldkhs of balls were fired against Savanur is still a local crass Bom. Gov Sci. CXIII. 210.

⁴ West's Southern Marátha Country, 23.

⁴ Country Maráthás 230 · Welks' South of India I 459.

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entrenched camp at Annavati in Maisur about twenty-five miles south of Bankapur, and advancing towards Savanur, took a strong position near Rattehalli about thirty-six miles south of Saranur. More, when joined by Fazl Ulláh, the whole force under Haidar's command amounted to about 20,000 horse and 40,000 foot, of which one-half were disciplined infantry. The Peshwa gaining through his cavalry correct information of the strength of Haidar's position, determined not to attack it, and instead employed his troops in driving out Haidar's garrisons from the towns and villages north of the Varda. In the hope of bringing on a general engagement, Haidar moved with 20,000 men intending to retire and draw the Marathas towards the strong position which Fazl Ullah held with the main body of the army. The Marathas threw out a few bodies of skirmishers, who retiring as he advanced drew Haidar forward, until their parties, always retiring but gradually thickening, at last formed solid masses of horse, which gradually moved round between Unidar and his camp, and forced him, not without heavy loss, to change his feigned retirement into a real retreat. He then fell back on his entrenched position at Annavati. The Peshwa followed; and after a few days appeared to be moving columns to invest his camp. Hadar, fancying he saw a chance of cutting off one of the Maratha columns, moved out with 2000 infantry, 1000 horse, and four light gans. He was again entired to advance too far and was completely surrounded. The speed of their horses saved Haidar and about fifty of his cavalry; the rest of the corps was destroyed. The approach of the south-west monsoon (June) put a stop to . further hostilities. The Peshwa cantoned for the rains at Narindra, about five miles north of Dharwar, billetting his horsemen among all the villages within a radius of twenty miles. As soon as the season allowed (October), the Poshwa laid siege to Dharwar. He succeeded in breaching the wall and the town capitulated. The whole country north of the Varda was now in his possession, except Mundgod in North Kanara, and this, when the weather cleared, he speedily reduced. Madhavrao Peshwa made over the command of the army to his uncle Raghunáthráo or Rághoba, who, in 1765, pursued Haidar across the Tungbhadra and forced him to agree to a treaty under which, besides paying 4320,000 (Rs. 32 lukhs), he gave up all claims on Savanur.1 Dharwar remained under the Marathas till 1773, when, taking advantage of the troubles at Poona caused by the death of Madhavrao Peshwa (1762-1773), Haidar sent a strong detachment under his son Tipu to recover the districts conquered by the Marathas in 1764,2 Haidar entered into close relations with Raghunáthráo the uncle of the murdered Peshwa Narayanrao, acknowledged him head of the Marathas, and agreed to support him. In 1776, according to Maisur accounts, in return for the gift of £160,000 (Rs. 16 lakhs), Raghoba agreed that Haidar should take and hold the country to the south of the Krishna,3

Grant Daff's Marathis, 230-332; Wilks' South of India, I. 461-461.

Grant Duff's Martthus, 363, Wilks' South of India, II. 173; Grant Duff (History, 400) doubts if Raghoba ever gave such an invitation.

Haidar crossed the Tungbhadra, took Bankapur and Savanur, and continued to push northwards till the rains (June 1776) stopped active operations. He returned to the south, leaving a chosen body of troops in Bankapur with directions to watch, and as far as possible provent supplies passing to the Dharwar garrison which had not been reduced. Meanwhile the Poona ministers opposed to Raghunáthráo obtained from the Nizám a promise to act with them against Haidar. Before the joint Márátha and Nizám armies could march. a small force under Konherráo Patvardhan and Pándurang, was (1776) sent to drive Haidar's troops out of Savanur. Muhammad Ali, the Maisur general and Rághoba's agent in command of a body of auxiliary Maráthás, came up with the troops under the Patvardhan at Sansi about twenty-five miles south-east of Dhárwár. Finding the Poona force drawn up in order of battle, Muhammad Ali began the action with his cavalry. He feigned a check, and, retiring in apparent disorder, was thoughtlessly followed by the Maráthás, who, confident of victory, pursued in headlong hasto till the fugitive Musalmans suddenly disappeared through openings in a powerful reserve. At the same time a body of men in ambush poured into the flanks of the Maráthas a tremendous fire of grape The slaughter was serious and the confusion and musketry. hopeless. Muhammad Ali made a determined charge at the head of his cavalry, and, completing the rout, continued the pursuit for nine miles, and captured many of the Marathas, among them their leader Pandurang.1 After this defeat, in 1777, the main body of the Marátha army of about 30,000 men under Parashurám Bháu, the most distinguished member of the Patvardhan family, and the Nizám's army about 40,000 strong under Ibrahim Khán, marched against Haidar. The Nizam's forces were bought off and the Marathas recrossed the Krishna without risking an action. This left the field open to Haidar, who in 1778 took Dharwar after a protracted siege. After the fall of Dharwar, Badami and Jalihal in South Bijapur were taken, and Haidar was master of the whole country south of the Krishna.2 He left Nargund, Navalgund, Dambal, and Shirhatti, and other strong places in the hands of their estateholders or desdis on their acknowledging his supremacy and agreeing The Poona ministers were too fully occupied to pay tribute.3 with the war against Raghunathrao and the English to allow them to make a serious attempt to recover the Karnátak. Haidar used this interval to strengthen his hold on the country by a close alliance with Hakim Khán the Nawah of Savanur. In 1779, tho eldest son of the Nawab was married to Haidar's eldest daughter, and Haidar's second son was married to the Nawah's daughter.4 These alliances led Haidar to support the Nawab in nominally recovering almost all the possessions which his father had in 1756 ceded to the Maráthás. From this time till Haidar's death in 1782 Hakim Khán prospered.5

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Wilks' South of India, II. 179; Grant Duff's Marathás, 400.
 Wilks' South of India, II. 186.
 Wilks' South of India, II. 206.
 Transactions in the Maratha Empire (1803), 88.

In 1779, as the Pooua ministers were anxious to secure his aid

in driving the English out of India, Haidar's right to the Marátha

territories south of the Krishna was admitted on payment of a yearly

sum of £110,000 (Rs. 11,00,000) to represent the Maratha share of

the revenue. Afterwards, when the war with the English was nearly over and when the treaty of Sálbái (1782) was in progress, Nána Phadnavis, the Peshwa's minister at Poona, tried to persuade Haidar to restore the territory north of the Tungbhadra, threatening, if Haidar refused, to join the English in attacking Maisur. But

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> the rivalry between Nana and Mahadaji Sindia and the death of Haidar in 1782 prevented Nána from gaining his object.1 Haidar's death, Nana Phadnavis called on Tipu to make good the arrears of tribute. Tipa acknowledged that tribute was due, but evaded paying it.2 A conference was arranged between Nana and the Nizam to form plans for recovering the territory to the south of the Krishna. But they failed to come to an agreement and Tipu remained in possession. The Savanur Nawab, who after Haidar's death (1782) had gone over to the Maráthás, incurred Tipu's wrath. who drove his family out and forced him to take refuge at Poons.3 In 1785, by demanding a higher tribute, Tipu estranged Venkatráo, the chief of Nargand who had been his tributary since 1778. As by himself he was unable to withstand Tipu, Venkatráo sought the help of the Bombay Government, and, as they were unable to assist him, he turned to the court of Poona. When Tipu pressed Venkatráo, Nána Phadnavis interfered. He declared that Tipu had no right to exact more than the former tribute, that landholders on the transfer. of districts were liable to no additional payments, and that the rights of Brahman landholders except when guilty of treason were always respected. Tipu replied by sending two bodies of troops to demand more tribute than the Nargund chief could pay, and so give him a pretext for reducing the fort. In March 1785, when news reached Poons that the siege of Nargund was begun, a body of Maráthás was sent from Poona to relieve Venkatráo. Beforo

the Poona detachment arrived, want of water had forced the Maisur troops to raise the siege. They were still in the neighbourhood, and after some skirmishing compelled the Marathas to retire, took the fort of Ramdurg about seventeen miles north of Nargund, and resumed

tribute would be exacted, the Marátha army recrossed the Krishna. The siege was pressed with redoubled vigour, and, on the strength of terms promised by Tipu, the Nargund chief capitulated. In spite of Tipu's promises, when the fort was taken, the chief was seized, he and his family were sent into captivity, and his daughter was taken into Tipu's harem. Kittur, a fort in Belgaum about forty miles west of Nargund, was also soized, and both Kitturand Nargund were garrisoned by Maisur troops. Tipu forcibly circumcised many Hindus of the territory south of the Krishna, and 2000 Brahman disciples of Shankaráchárya destroyed themselves to avoid the disgrace.4

On Tipu's assurance that only the regular

Siege of Nargund, 1785.

the siege of Nargund.

Grant Duff's Maráthis, 457. Grant Duff's Transactions in the Maratha Empire (1893), 88. Grant Duff's Maráthás, 458.

Grant Duff's Marathas, 466-67.

1786 the Maráthás and the Nizám formed an offensive alliance against Tipu, and agreed to begin operations by taking from him the country between the Krishna and the Tungbhadra. A detachment of 25,000 troops, chiefly horse under Tukáji Holkar and Ganeshpant Beheri another Marátha commander, was sent to drive Tipu's garrisons from the neighbourhood of Kittur and to act against the Maisur general Burhan-ud-din at Kittur. At the same time the confederate army under Haripant advanced and laid siege to Bádámi in South Bijapur, which, after a furious and persevering attack, they succeeded in taking. Holkar's detachment drove all Tipu's posts from the open country in the neighbourhood of Kittur, but failed in their attack on Kittur fort. Holkar then made one march of upwards of sixty miles to Savanur with the object of seizing Tipu's chief banker Rágvendra Náik. Rágvendra succeeded in escaping, but two or three other smaller bankers fell into Holkar's hands from whom he exacted a ransom of £20,000 (Rs. 2 lákhs). At Sávanur Holkar was joined by Hakim Khán the Nawáb, who, though closely related to Tipu, had been so badly treated by him that he willingly sided with the Maráthás. Holkar's and the Nawab's combined force repulsed an attack by Tipu's general Burhán-ud-din, who was forced to retire to Jerianvatti on the Varda.1 The confederate army under Haripant, after the fall of Badami and the seizure of the other forts, found itself opposed in the Nizam's territory by Tipu himself, who, with the greater part of his army, had crossed the Tungbhadra in As grain and forage were extremely scarce, to basket boats. procure supplies as well as to draw Tipu into the plain country, the Marátha general marched to Sávanur. Tipu followed and encamped in a strong position within six miles of the confederates, keeping the town of Savanur between the camps.2 In this situation both parties remained for fifteen days. On the first of October Tipu made preparations for a serious attack. He divided his force into four columns, the left centre commanded by himself; and, after the evening meal, moved off making a considerable detour with the object of delivering a combined attack on the enemy's left and centre. It was arranged that about an hour after midnight, when the head of his own column reached the point chosen for attack, he should fire a signal gun, which was to be answered by the heads of the three other divisions, and the attack was at once to begin. The night was dark and rainy. On reaching a small outpost Tipu's column was challenged; and Tipu, as if bent on letting the enemy know of his approach, ordered the outpost to be fired at. He again advanced, and when near the camp fired the signal gun, but listened in vain for a reply. After much delay and anxiety he fired another signal, which was answered by only He moved on, and entering the camp a little before dawn, found himself with no more than three hundred men. In the dark and wet the heads of all the columns except his own had lost their way, and from the same cause each column had broken into several divisions, which were all wandering at random in the dark.

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History.

Maisur,
1776-1792.

War with the
Mardthás.

1786-87.

¹ Grant Duff's Maráthás, 470. 2 Grant Duff's Maráthás, 471.

Chapter VII. History. MAISUR. 1776-1792. War with the Maráthás, 1786-87.

As the light strengthened, all were within view, and Tipu collected and arranged his troops. He found the Maratha camp empty and their army drawn up on a height. They began to cannonade Tipu's force, and he, according to his own account, ordered no gans of any size to fire in return. The confederates, thinking their assailants were without large guns, advanced carclessly against them and were repulsed with heavy loss. The accuracy of this account is doubtful, but there is no question that the day ended in Tipu's favour as the confederates fell back on a position whose left rested on the fort of Sávanur.1

The scarcity of forage and the weakness of their position induced Haripant to leave Savanur and the Nawab fell back with him ten miles. Tipu took Savanur, but lay inactive till the Muharram when he retired to Bankapur to hold the festival. In his absence Haripant without opposition breached, stormed, and took Shirhatti, a fortified town twenty miles north-east of Savanur. Savanur Tipu sent a messenger, nominally to treat of peace, but, according to his own statement and as the event showed, with the object of throwing the enemy off their guard.2 On pretence of forage Tipu moved and made a successful night attack on the confederate camp and secured the splendid equipage of the Nizám's general and 500 camels which carried it.3 In 1787, fearing that the English were about to take part against him, Tipu made a treaty with the Maráthás ceding them Nargund and in return receiving back the other towns and districts which the Maráthas had taken. Tipu also agreed to pay the Marátha share of the revenue and to restore to the Nawab of Savanur the territory which he held before his son's marriage with Haidar's daughter. The Nawab dreading Tipu's treachery accompanied the Maráthás to Poona.4

Tipn never meant to fulfil these engagements. As soon as the Maráthás had recrossed the Krishna, the Maisur troops retook Kittur. The Maráthás were much annoyed by Tipu's faithlessness, and, as both the English and the Nizam were interested in preventing the increase of Tipu's power, in 1790, when his

Wilks' South of India, IL 551-552.

¹ Wilks' South of India, II. 551-552.

² The herald was charged to deliver to Tukáji Holkar in the absence of Nizām Ali a speech to the following effect: 'You have obtained experience in feats of arms and are distinguished among the chiefs for superior valour. Now that war has begun its destructive career and thousands are doomed to fall, why should we longer witness the causeless effusion of human blood? It is better that you and I should singly descend into the field of combat, let the Almighty determine who is the conqueror and who the vanquished, and let that result terminate the contest. Or, if you have not sufficient confidence in your own single arm, take to your aid from one to ten men of your own selection, and I will meet you with equal numbers. Such was the practice in the days of our Prophet, and, though long discontinued, I desire to renew that species of warfare. But if prudence should dictate your weapons, and let us chief opposed to chief, horseman to horseman, and foot-soldier to foot-soldier engage in pitched battle, and let the vanquished become the subjects to the victors.' To this Holkar is said to have replied that, 'The passion for fighting had not descended to him from his ancestors, but rather the hereditary trade of flying, plundering, burning, and destroying, and the petty warfare which involves little danger.' Wilks' South of India, II, 555. 5556.

³ Wilks' South of India, II. 556.

Grant Duff's Maráthés, 472. 3 Wilks South of India, II. 556. Grant Duff's Maráthás, 472.

attacks on Travankor gave the English grounds for acting against Tipu, an offensive alliance was formed against him by the English, the Marathas, and the Nizam. After preliminaries were settled the Marátha force was placed under Parashurám Bháu Patvardhan whom the English engaged to supply with a detachment of British troops. The 8th and 11th battalions of Native Infantry, one company of European and two companies of Native Artillery, with six field pieces, which was the force named to act with the Marathas, sailed from Bombay under the command of Captain Little about the They disembarked at Sangameshvar in 20th of May 1790. Ratnagiri on the 29th of May, reached the top of the Amba pass by the 10th June, and arrived at a village not far from Tasgaon, about fifty miles east of the Amba pass on the 18th, where they joined Parashuram's army. The combined force did not cross the Krishna till the 11th of August. As they advanced they found no difficulty in driving out Tipu's soldiery, and the country was rapidly occupied until they came to the village of Narindra, about five miles north of Dharwar. When they reduced Narindra the Marátha force was daily joined by small parties till the whole amounted to 25,000 horse, 15,000 foot, and fifteen pieces of heavy cannon twenty-four pounders and upwards. There was a retinue of women, including every sort of dancing and singing girls, who numbered as many as the fighting men, and there were ten times as many followers and fifteen times as many animals. The Marátha camp was full of traders and craftsmen as busily employed as if they were at Poona and at peace.² The fort of Dharwar was held for Tipu by Badr-ul-Zaman Khan, one of his most trusted generals, with a garrison of seven thousand regulars and three thousand irregulars armed with matchlocks and swords. The combined English and Marátha army appeared before the fort on the 18th of Soptember. Till the 30th of October nothing of importance was done. On the 30th of October the English detachment attacked a body of the enemy who were posted outside the walls of the town. The enemy were driven back with the loss of three guns and a large number of killed and wounded. The loss on the side of the English was ten men killed and fifty-nine wounded. After this attack nothing further took place till the 13th of December when the British force attacked and took the town with a loss of sixty-two English and several hundred Marathas killed and wounded. The town was re-occupied by the enemy but they were driven out and the town was plundered by the Marathus. As the siege made little progress, on the 28th of Decomber, the British contingent was strengthened by the 2nd Bombay Regiment and the ninth battalion of Native Infantry from Bombay under Lieutenant-Colonel Frederick and afterwards by a corps about 300 strong, fifty of them Europeans of all nations and the rest natives. commanded by Mr. Yvons, an English gentleman in the Peshwa's service. In spite of these reinforcements, the siege languished chiefly on account of the backwardness of the Marathas. On the

Chapter VII. History. Maisur, 1786-1792.

Siege of Dhárwar, 1790.

¹ Grant Duff's Maráthás, 485.

Chapter VII. History. Maisur, 1776-1792. 13th of March (1790) Colonel Frederick died worn out by delays and disappointments. The siege was kept up till the 4th of April, or twenty-nine weeks in all, when the garrison, reduced by desertion and death from 10,000 to 3000, capitulated. During the siege the loss of the English detachment was 500 killed and wounded, of whom one hundred were Europeans; the Marátha loss was estimated at 3000. After the fall of Dhárwár, several places, among them Kushgal fort about twelve miles to the south-east of Dhárwár and the rich trading town of Hubli, surrendered to the Maráthás. The scene of war between the confederates and Tipu was transferred to the country south of the Tungbhadra; and the whole of the Bombay Karnátak passed to the Maráthás.

Condition, 1790.

In spite of the frequent wars, when it passed from Tipu to the Maráthás the district was fairly prosperous. For about sixteen miles north of Dhárwár the country was very rich; no garden mould could be richer.2 The lands near Dhárwar were in the highest state of tillage, affording the cattle luxuriant pasturage and the army plentiful supplies. About ten miles south-east of Dhárwár, the country round Hubli was well wooded and watered, and allowing for the time of the year (April) was in the highest tillage. Though there were no ornamental buildings, the town of Hubli was a rich centre of trade sending sandalwood and ivory to the western coast chiefly through Goa, and receiving silk cotton goods and rice. Many rich bankers negotiated bills on distant places and had such weight in the money market that the exchange and the currency of a great part of the neighbouring country was controlled by Hubli.3 Though the town of Savanur, about thirty-six miles south-east of Dharwar, had lately (1786) been ruined, the country round it was rich and well tilled. About ten miles south of Savanur near Devgiri the country was well wooded, watered, and tilled. At Haveri and Motabennur about ten miles south-east of Devgiri, the country had the same rich appearance. Motabennur, a market town, was particularly flourishing with stone houses and a brisk traffic with Maisur, chiefly in sandalwood.6 Birgi, about four miles further south, was almost surrounded with groves and gardens.7 Ránebennur in the extreme south-east of the district was a market town of some extent and importance with large gardens and groves to the east and north. In times of peace the country was full of oxen and sheep; the sheep for food, the oxen for work. Sheep were very cheap, selling at 6d. apiece (4 to the rupee). Fowls were abundant, about 11d. apiece (20 to the rupee); there were no geese, turkies, or tame ducks. The forests had tigers, bears, and leopards, a few lynx, and no lions. There were wolves, hyænas, jackals, and foxes on overy hill, and in the open country endless herds of antelope and other deer. There were peafowl, partridges, quail, snipe, doves

¹ Moor's Narrative of Captain Little's Detachment, 1-41; Grant Duff's Marathas, 485-87. A detailed account of the siege is given under Dharwar in Places.

² Moor's Narrative, 42, 259. ³ Moor's Narrative, 253-254. ⁴ Moor's Narrative 242,250

⁵ Moor's Narrative, 41-42. ⁷ Moor's Narrative, 51.

⁶ Moor's Narrative, 41-42. ⁷ Moor's Narrative, 51.

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Maisur, 1776-1792,

Condition,

1790.

plover, junglecock, florican, and bustard. The ponds were full of duck, teal, and widgeous. Fish were seldom eaten; the necessaries of life were so abundant that there was no need to drain the pools. In times of plenty grain was very cheap. A bullock-load or 160 pounds (80 pakka shers) of millet, enough to last a family of six for a month, could be bought for 2s. (Rc.1). Fruit and vegetables were less plentiful than grain, fowls, and mutton. Plantains were the chief fruit, and mangoes were abundant though inferior to Bombay, Goa, and other coast mangoes. Palm-juice was drunk fresh and fermented. The fermented juice was drunk to excess by most of the lower classes. The other fruits were melons, pomegranates, grapes, pincapples, limes, custardapples, jacks, and Cocoanuts and dates were abundant and were sent to the coast. Though it was supposed that the cocea-palm did not flourish away from the sea, there were groves or forests of cocoa-palms 150 miles from the coast. Neither rice nor gram was common; millet took the place of rice or wheat and kulthi of gram.1 About this time (1702) the district or sarkar of Bankapur, of the province or subha of Bijapur, contained sixteen sub-divisions or parganas yielding a yearly revenue of £251,299 (Rs. 25,42,990).2

By the treaty of Seringápatam (February 1792) at the end of the third Maisur War (1790-1792) the Maráthás were confirmed in their possession of the Bombay Karnátak. Most of Dhárwár and Sávanur was made over to Parashurám Bháu not as a grant or jágir, but in payment of the expenses he had incurred in the late war with Tipu. The parts not ceded to Parashurám Bháu's family were assigned for the support of certain garrisons and for the payment of the Marátha army under the command of Dhondu Pant Gokhale an officer of the Peshwa, whom, during his absonce to Seringápatam, Parashurám Bháu had left behind, and who before Parashurám's return, had by raising money and troops, become so strong that Parashurám Bháu had to temporise with him.3

While Parashuram Bhau was in the country south of the Tungbhadra, a Maratha named Dhundhia Vagh, whose daring and unscrupulousness had raised him to high rank in the Maisur army, left Tipu's service, and in 1790 with a few followers settled as a freebooter in the country near Dharwar. On his return from Maisur in 1793 Parashuram Bhau was too busily engaged in disputes with the Kolhapur chief to leave him time to attempt to suppress Dhundhia. In 1794 Dhondhu Pant whom the Poona government had directed to act against Dhundhia, attacked him with great vigour. Dhundhia Vagh was totally defeated and forced to take refuge with his late master Tipu with whom he had been negotiating for the

Moor's Narrative, 277-280.
The details are Haveli Rs. 2,57,156, Masur Rs. 15,000, Kundgel Rs. 9,09,037, Karajgi Rs. 1,20,000, Kundaran Rs. 41,250, Dhárwár or Nasarahad Rs. 1,20,129, Nargal Rs.51,377, Gadmi Rs.3,13,105, Misrikota Rs.97,500, Lakhmeshvar Rs.2,59,529, Rynabeli Its. 82,500, Haliyál Rs. 24,531, Bajgal Rs. 37,500, Banchalt Rs. 68,761, Harthar Rs. 10,368, and Risihali Rs. 13,1903. The Navalgund and Nargund subdivisions belonged to the district of Torgal. Navalgund yielded a yearly revenue of Rs. 75,120, and Nargund of Rs. 75,000. Waring's Maráthán, 213,216.
Stoles' Belgaum, 60.

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1795 - 1800.

recovery of Sávanur. From 1795 to 1800 the district was full of disturbances owing to Parashurám's absence at Poona and Kolhápur, to the self-aggrandizement of Dhondu Pant Gokhale, who in 1796, through the last Peshwa Bájiráo's (1796-1817) friendship had been appointed the Peshwa's governor or sar-subhedar of the Bombay Karnátak, and to the lax system of administration. In 1797 one Bhimrao, who had possessed himself of Dambal in Gadag, gathered an army and with Dhondhu Pant Gokhale's aid or connivance ravaged the rich and hitherto untouched country south of the Malprabha, and for twelve years carried on unceasing pillage and murder, until at last Dhondhu Pant's nephew Bápu Gokhale was forced to disown and seize him. This was not done until one-half of the population of the tract was destroyed and tillage was confined to little circles round villages from which the people on the approach of the enemy had to betake themselves to the village These towers, with which the villages however small were furnished, were the only security the people had for their lives, though occasionally even the towers were set fire to and all within died of suffocation. While the north was thus disturbed the other parts of the district were not at rest. Contests were continually going on between the Kolbápur chief, Parashurám Bháu, and Dhondu Pant Gokhale, sometimes jointly sometimes each for himself. In the course of these struggles (1799) Dhondu Pant appropriated Navalgund and Gadag which belonged to an hereditary desdi, 3 a great portion of the Bhau's territory was ravaged and usurped by the Kolhapur chief; and in 1799 Parashuram was killed.4 In 1799 the fourth Maisur War ended on the 4th of May by the victory of the confederate British and Nizam's armies, the fall of Seringapatam, and the death of Tipu. The descriptions of the country seem to show that it had fallen off considerably between 1790 and 1800. In 1790 and 1791 the ravages of Parashurám's army had caused ruin and famine, and between 1790 and 1794 the uncontrolled brigandage of Dhundhia Vágh had impoverished the people.5 In a private letter, dated the 20th of May 1800, Major Munro wrote: Savanur and Dharwar belong to the Peshwa and to Appa Saheb, the son of Parashuram Bhau. Neither of them have much authority. Their deputies plunder each other, and are seldom able to collect the revenue as their districts are full of a rebellious or rather of a thieving set of petty landlords.

¹ Gleig's Life of Munro, I. 254.
² Marshall's Statistical Report of Belgaum (1820), 134.
³ Stokes' Belgaum, 63.
⁶ Stokes' Belgaum, 61-64.
⁵ Gleig's Life of Munro, I. 260. When in 1791 Parashurám Bháu accompanied the English and the Nizám in their wars against Tipu he spread havec and dismay wherever he went. The country about Sashivhally in Maisur before Parashurám's invasion (1791) was in a very good state. After his destructive march not above one-fourth of the people remained alive and these were left destitute of everything which the Marathás could either carry away or destroy. The wretched remnants of the inhabitants had again begun to recover, when Dhundhia Vágh came among them (1790-1794). He did not put any one to death; but he plundered the houses and even burned some of the villages, the inhabitants of which he suspected of hiding their property. Buchanan's Mysore, III. 305.
⁶ Gleig's Life of Munro, I. 247.

Colonel A. Wellesley, afterwards the Duke of Wellington, while in pursuit of Dhundhia Vágh, wrote in a letter to Government dated the 7th of July 1800: 'Whether from a recollection of former oppressions or from a sense of their inability to protect them, it is clear that the people are averse to the government of the Bhau's family and desire a change.' In a letter to Major Munro on the 7th of August 1800, Colonel Wellesley wrote, 'I hope that before we shall have done in this country, if we do not take it for ourselves, we shall establish in it a strong government, one which can keep the relations of amity and peace. At all events, we have established a respect for ourselves; we have gained a knowledge of and have had friendly intercourse with the principal people; and it is not probable that they will hereafter be very forward to encourage any disturbance in our country. They see plainly that it is in our power to retaliate, and from what I have seen of their country and their mode of management, I am of opinion, that at present our robbers would get more than theirs, or in other words that they have more to lose than we have.'1 According to Buchanan, the territory south of the Varda, though fertile, was greatly inferior to the Savanur district; but both were fast becoming desert.² Near Harihar and as far at least as Savanur most of the husbandmen were Lingayats. There were scarcely any Maráthás among them. Very few of the poorer people married, as the expense of the marriage ceremony was considered too great. They pleased their mistresses by a piece of cloth after which they lived as husband and wife; and both the woman and her children were as much respected as if she had There were very few spinsters. been married with due ceremonies. Few of the men were in the habit of going to foreign countries, and the rich had more wives than one, which made up for the men who lived as bachelors. The people on the banks of the Tungbhadra were remarkably fickle, constantly changing from one side of the river to the other and at each time changing their masters. Buchanan found them remarkably stupid, though they prided themselves on being superior to their northern neighbours, who, according to them, were no better than beasts. The Brahmans also were stupid and illiterate.3

After his defeat in 1794 Dhundhia Vagh re-ontered Tipu's service and was offered speedy preferment if he would turn Muhammadan. Dhundhia refused, was forcibly circumcised, and was cast into prison. He was kept in irons till he was set free by the English on the taking of Seringapatam in May 1799. He soon began to plunder and with 300 men was driven from Maisur by a British force under Colonel Stevenson and Colonel Dalrymple. 1 He then entered Dhárwár, but was attacked by Dhondu Pant Gokhale into whose hands his family and effects fell. Ho next fled towards the territories of the Nawab of Savanur pursued by a

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Dhundhia Vagh, 1500.

² Buchanan's Mysore, III. 313.

Gleig's Life of Muuro, I. 261.
 Buchanan's Mysore, III. 314-315.
 Wellington's Supplementary Despatches, I, 295.

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detachment of Maratha horse. He offered to enter into Gokhale's service, but Gokhale refused to receive him unless he gave himself up.1 He left Savanur and in August or September 1799 entered the Kolhapur service, the chief readily receiving him into his army, He became too strong for the Kolhapur chief, quarrelled with him. set up for himself, gathered the disaffected and discontented of all parts of India, and, taking advantage of the absence of Appa Saheb and Gokhale at the siege of Kolhapur, re-entered the district, and established himself so firmly that no force which they could bring could ever drive him from it.2 He assumed the title of the King of the two Worlds, and in the early months of 1800 plundered several places near Kittur in Belgaum on the Dharwar frontier and to the north of Dharwar. He then established himself in the Savanur country, and, on the first of May 1800, laid siege to Dambal, twelve miles south-east of Gadag. While Dhuudhia was engaged at the siege of Dambal, Appa Sahob Patvardhan detached a force of 5000 cavalry and a large body of infantry to stop his Against Appa's force Dhundhia despatched one of equal strength. Appa's force was attacked, beaten, and dispersed, and about 300 horse were taken to Dhundhia's camp. Dhundhia got possession of Dambal, advanced to Hávanur thon in the Sávanur country, and was joined by all kinds of people chiefly Musalmans from Aurangabad, Haidarabad, Kadappa, and almost the whole of Tipu's cavalry.4 He sent small detachments across the Varda to take the forts in that country and to make collections, and, by the 18th of June 1800, except Havanur on the left bank of the Tungbhadra about sixteen miles north of Ranchennur, there was no fort of any consequence which had not fallen into Dhundhia's hands. Colonel Wellesley, who was in command of the troops in Maisur, represented that so long as Dhundhia remained at large it was impossible to settle the Maratha frontier, or to restore peace and order in Sunda in North Kanara which had been ceded to the English on the death of Tipu. He was ordered to march with a large force against Dhundia and was authorized to enter Marátha territory. He arrived at Harihar on the right bank of the Tungbhadra on the 16th of June, and on the 20th of June sent a patrol to reconncitre the fort of Airani on the left bank of the Tangbhadra, about six miles below Harihar. The fort was left by the garrison during the night and the English troops took possession on the morning of the 21st.⁵ By the 24th of June Colonel Wellesley had passed the Tungbhadra and on the 27th arrived with cavalry and advanced picquots before Ranebennur about twelve miles west of Airáni. The fort fired on the cavalry and an attack was instantly ordered. The assault was made by advanced picquets of fifty Europeans and 150 Natives under the command of Lieutenant-Colonel Monypenny and the leading battalion. Colonel

Wellington's Supplementary Despatches, I. 302; and Grant Duff's Marathas, 543.
 Wellington's Supplementary Despatches, II. 78.
 Wellington a Supplementary Despatches, I. 558-560.
 Wellington's Supplementary Despatches, I. 560.
 Wellington's Supplementary Despatches, I. 560.
 Wellington's Supplementary Despatches, II. 28.

Stevenson posted cavalry round the fort to cut off the garrison's retreat and Lieutenant-Colonel Monypenny led the attack with such dash that the place was escaladed without the loss of a man. Most of the garrison of 500 men were killed. Like the fort of Airáni Ránebennur was given to Appa Sáheb. Shortly after the capture of Ránebennur a detachment under Colonel Stevenson drove Dhundhia's people out of the country between the Varda and the Tung bladra.

Meanwhile Dhondu Pant Gokhale was moving south from Kolhápur ostensibly to co-operate with Colonel Wellesley against Dhundhia who had removed (19th June) to Hubli about ten miles south of Dhárwár. It was arranged that Gokhale should not cross the Malprabha until Colonel Wellesley had passed the Varda and had advanced to Sávanur. But before Colonel Wellesley had passed the Varda, Gokhale crossed the Malprabha and went into the Kittur district with the intention of making peace with Dhundhia. He restored to Dhundhia his family and everything that was taken from him in his defeat in 1799, and sent an agent to his camp to negotiate. Hearing that after leaving him the same agent had gone to Colonel Wellesley's camp, Dhundhia suspected Gokhale of treachery and moved against him. Gokhale endeavoured to draw off into the forest country north-west of Kittur, but on the 30th of June between Dhárwár and Haliyál in Kánara Dhundhia attacked his rear guard of 250 horse and cut it to pieces. Gokhale, who was in command, was slain, and, in fulfilment of a vow which he had taken on his defeat in 1799, Dhundhia dyed his moustaches in Gokhale's heart's-blood. Four of the guns fell into Dhundhia's hands who pursued the main body of the army. The horse escaped, some to Dharwar and others to Haliyal where they were welcomed and protected by a British detachment.2 News of Gokhale's defeat and death reached Colonel Wellesley at Ránebennur on the 2nd of July. He left Ránebennur and arrived at Háveri on the Poona-Harihar road on the 3rd, he reached Devgiri on the 6th, and the right bank of the Varda on the 7th. After building a redoubt to guard the boats and secure communication with the rear, he crossed to the left bank of the Varda. On the 11th Colonel Wellesley heard that Dhundhia, who had been in the Kittur country till the 7th, had advanced to Kundgol, about twenty miles north of Savanur, with the intention of giving him battle. Colonel Wellesley marched to Sávanuron the 12th to place his baggage in safety. On the evening of the 13th he heard that Dhundhia had come to within six miles of his camp, and then returned to Kundgol. Leaving his baggage in Savanur, on the morning of the 14th, Colonel Wellesley marched to Kundgol, but on the night of the 13th Dhundhia had fled about eighteen miles east to Kanveh. Thus between the morning of the 13th and of the 14th Dhundhia marched about fifty-four miles. Dhundhia had left a garrison of 600 men in Kundgol, which the British troops attacked after a march of over twenty-two miles and when they had been under arms more

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THE PESHWAS, 1792-1817. Colonel Wellesley, 1800.

Wellington's Supplementary Despatches, II. 34-39.
 Wellington's Supplementary Despatches, II. 47, 51, 53, 54; Grant Duff's Maráthás, 551.

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Tur. Penuwis,
1702-1817.

Colonel Wellesley,
1800.

than twelve hours. The cavalry under Colonel Stevenson surrounded the place; the gateway was attacked by the 1st battalion of the 12th Regiment and an endeavour was made to blow it open, while the grandiers of the 73rd Regiment under Captain Todd, supported by those of the 1st battalion of the 8th Regiment, escaladed the curtain on the opposite side with a spirit which overcame every obstacle. The place was carried with small loss on the evening of the 14th. The officers who distinguished themselves on this occasion were Colonel Stevenson, Lieutenant-Colonel Torin, Lieutenant-Colonel Tolfrey, Major Powis, Captain Balfour of the Artillery, and Captain Todd, and the granadiers of the 73rd. As Dhandhia's people had begun to desert him at Kundgol, Colonel Wellesley issued a proclamation offering a reward of £3000 (Rs. 30,000) for his person. On the 15th Colonel Wellesley marched to Lakhmeshvar, a large and rich town about sixteen miles south-east of Kundgel, which was evacuated. On the 16th he marched twelve miles north to Shirhatti which before his arrival had been undergoing a siege for three weeks. Colonel Wellesley spent the 17th and 18th in retracing his steps to Savanur to get his baggage and provisions. Meanwhile Dhundhia had fled from Kanveh on the 15th to the forests behind Dambal, and thence on the 17th to Annigeri about thirty miles cast of Dharwar.1 On the night of the 19th Colonel Wellesley was joined at Savanur by part of Gokhalo's beaten army under the command of his nephew Bapu Gokhale, which had remained at Haliyal from the day of their defeat (30th June). With the intention of joining Colonel Bowser, who was coming from the Doab, Colonel Wellesley left Savanur, arrived at Kalasa about ten miles north on the 22nd, at Lakhmeshvar about five miles further north on the 23rd where he received supplies of cattle, and at Shirhatti about ten miles further north on the 25th, where he was joined by about 1500 Marátha horso the remaining portion of Gokhale's beaten army. On the 26th he went to Dambal, about fifteen miles north-east, and appeared before the fort which contained about 1000 men. To them he offered a promise of safety, and gave them an hour to consider till the line would come up. They declined to accept the terms offered and the fort was surrounded by the cavalry under Colonel Stevenson and by the Marathas under Gokhale. It was attacked in three places. At the gateway by Major Desse, with the picquets, supported by two companies of the 2nd battalion of the 2nd Regiment; on one face by Lieutenant-Colonel Capper with the grenadiers and light infantry of the 73rd and the 2nd battalion of the 4th Regiment; and on the other by Captain Macpherson with the groundiers and light infantry of the 77th and the remainder of the 2nd battalien of the 2nd Bombay Regiment. It was impossible to force the gateway. But the party under Ensign Hooper, of the 73rd Regiment, entered the fort by escalade, and the other two attacks succeeded nearly at the same time. Almost the only loss to the assailants was caused by the breaking of a ladder.2 The commandant of the fort fell into the

Wellington's Supplementary Despatches, II. 56, 59, 61, 65-67, Wellington's Supplementary Despatches, II, 73,

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hands of the British troops and was hanged.\textstyle The fort was handed to the Peshwa's commandant who had been confined in irons in the fort since Dhundhia took it on the 4th of May. On the 27th Colonel Wellesley arrived at Gadag, about fifteen miles north, but found it empty. The fall of Dambal was a severe blow to Dhundhia, who moved from Annigeri to Saundatti in Belgaum with the object of crossing the Malprabha. By the 27th of July the whole district was cleared of Dhundhia and his people; not a single stronghold was left in his hands. Colonel Wellesley arrived at Alagvadi, about five miles north of Navalgund, on the 29th. From Alagvadi he marched into Belgaum, plundered and destroyed Dhundhia's camp on the Malprabha, pursued him through Belgaum, Bijapur, and the Nizam's territories, until on the 10th of September he was surprised and killed at the Nizam's village of Konagal. The destruction of Dhundhia's power did not free the district from disturbance. So bitter was the feeling between Peshwa Bájiráo and the Patvardhans, that the Peshwa instructed Bápu Gokhale his governor, or sar-subhedár, of the Bombay Karnátak to harass and annoy Appa Sáheb, and in November 1801 Bápu Gokhale brought an army, and took and plundered Savanur and Haveri about six miles south of Karajgi.2

In October 1802 Peshwa Bájiráo was driven by Holkar from Poons, and took refuge with the English with whom he entered into the treaty of Bassein (31st December). Under the terms of this treaty, in return for the British guarantee of protection, to meet the expenses of the subsidiary force, along with other territory Bájiráo ceded the Savanur country with twenty-six sub-divisions and with a yearly revenue of £102,284 (Rs. 10,22,840) and the sub-division of Bankapur with a yearly revenue of £55,676 (Rs. 5,56,760). At the close of 1803, this territory was restored to the Peshwa in exchange for land in Bundelkhand. To reinstate Bájiráo at Poona General Wellesley, who had returned to Maisur after Dhundhia's death, again entered (1803) Dhárwár on his way to Poona. During the campaign against Sindia and the Berar Raja (1803) the district, though torn by internal dissensions, remained fairly quiet, as General Wellesley had made it clearly understood that he would

not have his communication with the south disturbed.3 ¹ Wellington's Despatches, I. 69. The commandant seems to have been hanged because he did not give up the fort (Gov. Gen. to Secret Com. of the Board of Directors, 31st August 1880, Wellington's Despatches, I. 69). Colonel Wellesley seems to have afterwards regretted that the commandant was hanged. In 1801, Secins to have alterwards regretive that the commandant was hanged. In 1801, Colonel Stevenson, who was second in command at Dambal, wrots to General Wellesley to use his influence to get him the same summary powers which General Wellesley had at Dambal. General Wellesley (1st July 1801, Sup. Despatches, II. 484) disapproved of Colonel Stevenson's proposal, saying, such extraordinary powers ought never to be exercised. According to a correspondent in the Bombay Gazette (27th April 1881), before he left India, General Wellesley induced the Government of Rombay to allow the widow of the commandant to adopt a son and the son to hear (27th April 1881), before he left India, General Wellesley induced the Government of Bombay to allow the widow of the commandant to adopt a son and the son to bear the hereditary title of Bahádur Desái of Dambal. According to Ráo Bahádur Tirmalráo the commandant's name was Shrinivas Venkatádri, a Smart Bráhman whose grandson joined the rebellion in 1858 and forfeited his life and estates. A correspondent of the Bombay Gazette (10th March 1881) notices that the people of the country have not forgotten the hanging of the commandant.

2 Wellington's Supplementary Despatches, II. 623.

3 Wellington's Despatches, I. 124; West's Southern Marátha Country, 29.

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THE PESHWAS,
1792-1817.

Disorders,
1800-1803.

1800 and 1803 the struggle for power and plunder among the local estate-holders and officers of the Peshwa government continued without intermission. The two chief estate-holders within Dharwar limits were Appa Sáheb Patvardhan who enjoyed a yearly revenue of £40,000 (Rs. 4 lákhs) and who kept 500 horse and 1000 foot, and Venkatráo of Nargund and Ramdurg, a near relative of both Appa Saheb and Bápu Gokhale, who enjoyed a revenue of £12,500 (Rs. 1,25,000) and who kept 500 men to garrison Nargund fort. Among the officers of the Peshwa were Bapu Gokhale who commanded a force of 2000 horse, 1000 infantry with two or three guns, and 1000 Pendháris. He held Navalgund and Gadag yielding a revenue of £50,000 (Rs. 5 lakhs), and added much to his income by plundering the country near his districts. Ganpatrav Pense, besides holding his own estate in South Bijapur, managed Ranebennur and Hangal which were the estates of a Poona officer named Rupram Chaudri; these estates together yielded a yearly revenue of £12,000 (Rs. 1,20,000). Bápuji Sindia, who had commanded Dhárwár fort since 1794, maintained a garrison of 800 peons and 120 horse out of the revenues of the districts of Betigeri and Mardagi yielding a yearly revenue of £12,000 (Rs. 1,20,000). Amratrav, the adoptive brother of Peshwa Bájiráo held the town and districts of Annigeri and Parasgad in Belgaum yielding a yearly revenue of £5000 (Rs. 50,000). Besides these there was Kheir Khan the Nawab of Sayanur the only Musalmán of note. He had been so ill-used by Tipu and was so harassed by the Brahman estateholders and chiefs, that in 1800 he placed himself under the protection of Colonel Wellesley. Colonel Wellesley had arranged to secure his revenues to the Nawab but nothing was done.1 He was a pensioner on the Maráthás, but his pension of £500 (Rs. 5000) a year was seldom paid. In 1806 his palace was in ruins, and himself and his family in rags. Towards the close of Bajirao's reign (1813-17), as they knew he was bent on their ruin, most of the Southern Maratha chiefs, though not actively turbulent, maintained an attitude of semi-independence of the Peshwa. To this want of harmony among the rulers were added the poverty of the country and the misery of the peasantry brought about by the Peshwa's system of farming the revenue. Independently of the distrust which Bujirao's character and aims excited the power wielded by the notorious Trimbakji Denglia caused general disgust. The temper of the country was shown in 1814 by the refusal of the commandant of Dharwar to give up the fort to Trimbakji in accordance with the orders of the Peshwa who had to send a force to invest it.2 On the 13th of June 1817, under the treaty of Poona, the Peshwa agreed to cede territory in lieu of the contingent he was bound by the treaty of Bassein to maintain. Dhárwár and Kusvugal about fifteen miles east of Dhárwár, together with the districts south of the Varda, were among the cessions. The early occupation of these districts was considered of great import-

¹ Transactions in the Marátha Empire (1803), 85-88.
² Grant Duff's Maráthás, 623-624. When asked by Bájiráo to surrender the fort to Trimbakji the commandant replied: 'If your Highness will send a gentleman to relieve me in the command, or if you will send a clerk in your own name, to whom I can commit my charge, your servant will present the keys to him; but I will never give over the fort of Dhárwár to such a person as Trimbakji Deuglia.'

ance to the British interests as it would facilitate the extensive operations at that time in course of preparation against the Pendháris, and, in the case of rupture with the Peshwa, the possession of Dharwar would be of infinite value to any force advancing from Colonel, afterwards Sir Thomas, Munro was appointed Commissioner with both civil and military command of the newly acquired territory. Taking with him a force, already on the Tungbhadra under Brigadier General Pritzler, he marched to Dharwar. Major Newall at the head of a battalion of Native Infantry was sent in advance, and he conducted matters with so much address that he provailed on the garrison, though in a state of mutiny, to yield. In July 1817, when Colonel Munro and his party arrived, they found the fort in the hands of the Company's troops.2 Shortly after his arrival and before hostilities with the Peshwa had begun Munro was ordered to reduce Sundur, a principality beyond the Tungbhadra, whose chief had defied the authority of the Peshwa, and for whose reduction the Company had long before given a pledge. On the 11th of October, leaving the second battalion of the 4th Regiment of Native Infantry and two six-pounder field-pieces under the command of Major Newall to occupy Dharwar, Kusvugal, and Ranchennur, Colonel Munro and Lieutenant-Colonel Dalrymple crossed the Tungbhadra with the remainder of the force and re-After this service, on the 7th of November, in obeduced Sundur. dience to instructions, Colonel Munro made over command to Colonel Hewett, C.B., with directions to move the brigade to the point where Brigndier-General Pritzler was appointed to join.3 Colonel Munro returned to Dharwar on the 14th of November, and there heard of the outbreak of the war with the Peshwa and of the battle of Kirkee (5th November). On the 28th of November he wrote to the Governor-General: 'The hostile conduct of the Peshwa and my present situation in the middle of the Southern Marathas, where I have an opportunity of seeing a good deal of their civil and military government, will, I hope, in some degree excuse my addressing your Lordship. The local situation of the Poona territories and the still remaining influence of the Peshwa, as the nominal head of the Marátha states, make the overthrow of his government perhaps themost important of all the measures that can be adopted for the safety of our own dominions. The Marátha government from its foundation has been one of the most destructive that ever existed in India. It never relinquished the predatory spirit of its founder Shivaji. That spirit grew with its power, and, when its empire extended from the Ganges to the Kaveri, this nation was little better than a horde of imperial thieves. All other Hindu states took a pride in the improvement of the country and in the construction of temples, pends, canals, and other public works. The Marathas have done nothing of this kind: their work has been chiefly desolation. They did not seek their revenue in the improvement of the country, but in the exaction of an established tribute from their neighbours and in predatory incursions to lovy more tribute. Though now fortunately obliged to relinquish their claims,

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Defects of the Mardtha Guvernment.

¹ Stokes' Belgaum, 73.

Blacker's Maratha War, 59-60.

Gleig's Life of Munro, I. 460.
 Gleig's Life of Munro, I. 171 - 173.

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the wish to revive them will never cease but with the extinction of their power. A government so hostile in its principles to improvement and tranquillity ought, if possible, to be completely overthrown. It may be a matter of some difficulty to decide what ought to be established in its room, and whether the chief of the government should be taken from among the relations of the Peshwa or the descendants of Shivaji. Before the establishment of the new state it might be expedient to require the cession to the British Government of the provinces south of the Krishna. The provinces between the Varda and the Krishna are not properly Marátha; though there is a considerable mixture of Maráthás, the Kánarese form the body of the people. The Maratha estate-holders or jagirdars and their principal servants are in some measure considered as strangers and conquerors. The best of the horse are in general Maráthás and are no doubt attached to their chiefs; but the infantry in the forts and villages are mostly Káparese and are ready to join any power that will pay them. All the trading classes are anxious for the expulsion of the Marathas because they interrupt their trade by arbitrary exactions and often plunder them of their whole property. The heads of villages, a much more powerful body than the commercial class, are likewise very generally desirons of being relieved from the Maratha dominion.

Colonel Munro's Conquest, 1817.

When Colonel Munro heard that war had broken out, he began to make preparations to act against the Peshwa's troops and to take the country. For these purposes his means were of the slenderest. The force at his disposal consisted of five companies of Native Infantry, one gun, and one mortar. He had not even the help of a staff officer. But he had a most able accond in Lieutenant-Colonel Newall, who, after being appointed by the Madras Government to the special command of the fortress of Dharwar, was allowed to leave it for more active and important service in the field. Just before the outbreak of the war the Peshwa had directed the Southern Marátha chiefs to reoccupy the district ceded by the treaty of Poona and had ordered Kásiráo Gokhale, his civil and military governor, to support them. The country was studded with forts, all of which though not of a superior order were secure against hasty assault and required to be breached in order to be reduced. These, together with other posts capable of embarrassing the movements of an enemy, were also filled with the Peshwa's adherents.1 With these difficulties Munro, who was promoted to be General on the 29th of November, had to deal. He wrote several times to the Madras Government for regular troops, but no troops were sent. Availing himself of the confidence and goodwill of the people he took the bold step of using the inhabitants of the ceded country to subdue it for him. He appointed military officers or amildars to most of the enemy's districts with orders to enlist armed constables or peons and take as much territory as possible. He had soon as many as twenty-five officers or amildárs, with about seven thousand constables or peons.2 Among the officers one Rámráo of Maisur

Blacker's Maratha War, 286; Gleig's Life of Munro, I. 475-76.
 Gleig's Life of Munro, I. 479; Stokes' Belgaum, 74.

was appointed to Navalgund about twenty miles north-east of Dharwar. He very quickly took possession of more than half the district, and on the 19th of December (1817) advanced from a village about two miles from Navalgand with 500 men to attack Kásiráo Gokhale's son who was at that place with a body of seven hundred About 600 of the horse were picquetted in the streets and in the open space between the town and the fort. The rest were mounted and watching Rúmráo who advanced at noon so rapidly that he entered the town before the horsemen could mount and The panic was so great that the Marátha horse fled in every direction without attempting to offer resistance. Nineteen horses were taken alive and twenty were found dead. A large number of the enemy were killed, Kásiráo's son escaped with difficulty, and of the two officers under him one was killed and the other wounded and taken. On hearing of the defeat of his son, Kásiráo, who was then at Bádámi in South Bijápur, marched to join him with 550 horse and 200 foot, and after gathering the fugitives reached Navalgund on the 22nd of December. Rámráo retired into the old fort, and, on the 23rd, with his ammunition nearly exhausted, he was very hard pressed by Kásiráo. On hearing that Kásiráo had reached Navalgund, on the morning of the 23rd, General Munro marched from Dharwar with two flank companies, one of the battalion guns, and a five and a half inch mortar under the command of Major Newall. Within two miles of Navalgund some small parties of horse were seen; and about a mile further the main body was discovered moving slowly along the side of a rising ground at a distance of about a thousand yards. As the enemy seemed to intend to come round on General Munro's baggage two shells were thrown and two horsemen were killed. On this the whole body moved off attended by about two hundred foot, and were soon out of sight leaving about ten dead in the streets.1 After the blockade of Navalgund was raised General Munro and Major Newall returned to Dharwar. In the beginning of 1818 (3rd January), escorted by Licutenant-Colonel Newall at the head of a detachment of three companies, a reinforcement of two iron eighteen-pounders, two iron and two brass twelve-pounders, and two mortars, was received from the garrison at Belári. With these came six fresh companies, two of the 2nd battalion of the 12th Native Infantry and four of the 2nd battalion of Pioneers, and three troops of the 5th Native Infantry under the command of Captain Garton. The last were furnished on his own responsibility by Major-General Lang who commanded in the ceded With these reinforcements General Munro considered himself strong enough to take the offensive. On the 5th of January he invested Gadag, about forty miles east of Dharwar, and, after a few shells had been thrown and a battery erected, the place surrendered on the 6th. On the 7th he moved on Dambal, about twelve miles south-east of Gadag, which after sustaining a four hours' fire from two batteries capitulated on the morning of the 8th. From Dambal he marched on Hubli, forty miles west, where he arrived on the 13th, having received by the way an accession to his force of two hundred Maisur regular

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¹ Gleig's Life of Munto, 1, 480-482.

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The commandant of Hubli fort on being summend promised to surrender on the following morning and kept his west marching out with 300 men, the remains of a more numeros garrison, of whom a large portion had deserted from want of row. On the following day (15th) Misrikota, about eight miles south-mes of Hubli, was admitted to the same terms. All these places General Munro immediately occupied by corpy of constables or peons without crippling his little army of regulars. He returned to Dharwar or the 16th without the loss of a man, though threatened at every step by Kásiráo Gokhale's cavalry. The system of securing the districts by the help of irregular troops was attended with extraordinary success. The soarmed constables in separate parties under their officers, not only drove the enemy from the open country, but from several forts and many walled villages. To callst the sympathy of the husbandmen and the people in general, General Munro caused it to be proclaimed that the British Government would treat as enemies all who in future paid tribute to the Peshwa or his officers. The people who were ground down by the Marathus gladly obeyed so pleasing an order. They not only refused to satisfy the demands of their old masters, but neted everywhere in aid of the irregulars. Before the 18th of January the whole of the country south of the Malprablia was completely in the hands of General Munro,2 General Munro remained at Dharwar till the 4th of February organizing his force and bringing the conquered country to order. His troops were in the interval actively employed partly in escorting treasure partly in opposing the Pendháric. A band of these maranders passing the flank of the British troops beyond the Narbada and ascending the Berar hills, had marched south and spread havoe in the Company's territories beyond the Tungbhadra. One of these marauding companies recressed the Tungbhadra on the 18th of January and marched north leaving the Sunda forests in Kanara about six miles on their left. On the 20th General Munro heard of them and at eight o'clock that night detached Captain Garton with three troops of the 5th Light Cavalry to intercept them passing between Dharwar and Haliyal. Captain Garton came by surprise upon the enemy's bivounc at three in the following morning (21st) and within an hour they were driven beyond the frontier with a loss of twenty men and forty horses. On the 5th of February General Munro started for Badami on the Malprahba in South Bijapar. His force included three troops of Cavalry, twelve companies of Native Infantry, four companies of Pioneers, four heavy guns, four field pieces, and a howitzer. He marched first to Navalgund and then to Hullur seven miles north-west of Ron, where he encamped on the 8th. The Pioneers, who were employed this day in opening a road in advance, were driven in by a party of horse. To reconnoitre the strength and designs of the enemy a picquet of thirty native cavalry were ordered out accompanied by Captain Middleton, the officer on duty for the day. This picquet was entired

Blacker's Marátha War, 287; Gleig's Life of Munro, I, 483-81.
 Gleig's Life of Munro, I, 482, 485.
 Blacker's Marátha War, 288-89; Gleig's Life of Munro, I, 185-86.

to follow small parties of the enemy until they found themselves exposed to the attack of an overwhelming force. Though very closely pressed they retreated in good order and gained the camp with the loss of nine men and eight horses killed and wounded. A troop of the 5th Cavalry was immediately ordered out to repel the enemy who retired, and Captain Munro, who commanded, after pursuing till nightfall made no more impression on them than the destruction of a few of the worst mounted.1 About this time (10th February) the English took possession of Sátára and by proclamation issued on the 11th of February the Peshwa was formally deposed and with certain specified exceptions his territory was annexed to the British dominions.² From this date the lands included in the present district of Dharwar, which were already in the hands of General Munro, may be said to have passed to the The scene of General Munro's exploits was shifted first to Bijapur, then to Belgaum, and then to Sholapur until his triumphantly successful campaign ended on the 15th of May with the reduction of the strong fortress of Sholapur.3 The approach of the monsoon forced General Munro to bring back from Sholapur his as well as General Pritzler's divisions of the grand army of the Deccan and they reached Hubli on the 15th of June 1818. Lieutenant-Colonel Newall with the second battalion of the fourth Regiment resumed possession of Dhárwár into which were thrown the heavy guns and ordnance stores; and the head-quarters and remaining corps cantoned at Hubli in preparation for the approaching rains.4

On General Munro devolved not merely the conduct of the war but the civil administration of all the provinces which he had obtained by conquest or cession. Every question connected with the settlement of claims, the adjustment of the revenue, and the administration of justice was referred to him; his tent was not more the head-quarters of an army than the chief civil court in the Bombay Karnatak. How great an impression General Munro's success made on those of his contemporaries who were best able to estimate his services is shown by the following letter from Sir John Malcolm to Mr. Adams, the Secretary to the Government of India (13th February 1818): 'I send you a copy of a public letter from Tom Munro Saheb, written for the information of Sir Thomas Hislop. If this letter makes the same impression upon you that it did upon me, we shall all recede, as this extraordinary man comes forward. We use common vulgar means, and go on zealously and actively and courageously enough; but how different is his part in the drama! Insulated in an enemy's country with no military means whatever (five disposable companies of sepoys were nothing), he forms the plan of subduing the country, expelling the army by which it is occupied, and collecting the revenues that are due to the enemy through the means of the inhabitants themselves aided and

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² Grant Duff's Maráthás, 660. ¹ Blacker's Maratha War, 289.

Details of General Munro's successes in each of these districts are given in their atistical Accounts.

Blacker's Maratha War, 314. Statistical Accounts.

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General Munro,
1818.

supported by a few irregular infantry, whom he invites, from the neighbouring provinces for that purpose. His plan, which is at once simple and great, is successful in a degree that a mind like his could alone have anticipated. The country comes into his hands by the most legitimate of all modes, the zealous and spirited efforts of the natives to place themselves under his rule, and to enjoy the benefits of a government, which, when administered by a man like him, is one of the best in the world. Munro, they say, has been aided in this great work by his local reputation, but that adds to his title to praise. His popularity, in the quarter where he is placed. is the result of long experience of his talents and virtues, and rests exactly upon that basis of which an able and good man may be proud.'1 In the British House of Commons, on the occasion of a vote of thanks being passed to the Indian army, Mr. Canning spoke of General Munro's service in the following terms: 'At the southern extremity of this long line of operations, and in a part of the campaign carried on in a district far from public gaze, and without the opportunities of early special notice, was employed a man whose name I should indeed have been sorry to have passed over in silence. I allude to Colonel Thomas Munro, a gentleman of whose rare qualifications the late House of Commons had opportunities of judging at their bar, on the renewal of the East India Company's charter, and than whom Europe never produced a more accomplished statesman, nor India, so fertile in heroes, a more skilful soldier. This gentleman, whose occupations for some years must have been rather of a civil and administrative than of a military nature, was called early in the war to exercise abilities which, though dormant, had not rusted from disuse. He went into the field with not more than five or six hundred men, of whom a very small proportion were Europeans, and marched into the Marátha territories to take possession of the country which had been ceded to us by the treaty of Poona. The population which he subjugated by arms he managed with such address, equity, and wisdom, that he established an empire over their hearts and feelings. Nine forts were surrendered to him or taken by assault on his way; and at the end of a silent and scarcely observed progress, he emerged from a territory heretofore hostile to the British interest, with an accession instead of a diminution of force leaving everything secure and tranquil behind him. This result speaks more than could be told by any minute and extended commentary.'2 The shattered state of his health compelled General Munro to leave his appointments, both civil and military, in the Southern Maratha country and in the autumn of 1818 he returned to Madras. On his recommendation, Mr. Chaplin, of the Madras Civil Service, who was Collector of Belári, was appointed under Mr. Mountstuart Elphinstone, Principal Collector of the Maratha Country south of the Krishna and Political Agent with the Raja of Kolhapur and

1 Gleig's Life of Munro, L. 503.

² Gleig's Life of Munro, I. 505. Mr. Canning was mistaken regarding the number of fortresses taken. More than nine were reduced directly by General Munro, and more than twenty-seven by his officers.

the southern Jágirdárs. 1 It has been stated above that after the reduction of Sholapur (15th May) General Munro's army returned for the rains, part under Lieutenant-Colonel Newall to Dharwar and part under General Pritzler to Hubli. In the latter half (July-December) of the year (1818) cholera prevailed to a frightful degree in this part of the country causing immense mortality in the army and among the people generally. At Hubli, in General Pritzler's camp, in three days two officers and upwards of one hundred Europeans were carried off by cholera. Between 1819 and 1824 the district seems to have been quiet.3 In October 1824 Mr. Thackeray, the Political Agent and Principal Collector, was shot dead in a disturbance at Kittur, the chief of which had in July died childless. In 1826 the question arose whether the district of Dhárwár and the states under it should continue under Bombay or be transferred to the Madras Presidency. Much correspondence passed between the two Governments, each claiming the territory as most fitly belonging to them.4 When the question of the transfer was referred to them.

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Cholera,
1818.

¹ Grant Duff's Maráthás, 679.
² Bombay Courier, 19th December 1818.

³ Mr. F. L. Charles, C. S. ⁴ The reasons in favour of the districts continuing under the Government which ruled the Decean and the west coast were: That of the Marathachiefs whose head-quarters were in Poona or Satara, some held a large part of the Karnatak districts; that some of the Patvardhans whose possessions lay chiefly to the south of the Krishna lived to the north of the river and some had possessions scattered over districts near Poona and north of the river and some had possessions scattered over districts near Poons and Sholapur, which must keep them connected with Bombay and make them look to Bombay for redress; that the difficulty of managing these chiefs would increase as the seat of government was more remote; that the distance of the Madras Government must render it in some degree liable to be guided by the representations of the local authorities in measures connected with these chiefs and tend to diminish their security; and that the facility which Bombay possesses of throwing in reinforcements by sea at a week's warning would give her the best means of putting down insurrection in these provinces and made Bombay the government best suited for their administration. The reasons in favour of their transfer to Madras were thus set forth by Sir Thomas Munro, then Governor of Madras: That from its geographical position Bombay was unfit to render military aid at all seasons of the year, but that Madras was in overy way fit to render without delay such aid in cases of emergency; that the management of Maratha chiefs had ceased to be a difficulty to the Madras Government; that the transfer would have the effect of putting out of memory the existence of the old Maratha confederacy; that the estate-holders or jāgirdārs were strangers from the Konkan and from the that the estate-holders or jagirdars were strangers from the Konkan and from the countries beyond the Krishna and had no influence over the bulk of the people; that mero distance could never be the rule for the annexation of territory to any particular presidency; that the residence of the Maratha chiefs to the north of the Krishna would vary with the fancies of the chiefs and with the seat of government; that their detached possessions under different Governments would not be attended with any administrative difficulty; that much administrative inconvenience would follow if the civil and military power were in the hands of different governments, and, as the country was already in the hands of Madras troops, its civil administration should be in the hands of the Madras Government; that the Dharwar district was bounded on the east and west by Madras districts and therefore its transfer to Madras was on the east and west by Madras districts and therefore its interest madras was advisable on administrative grounds; that the district, though it had been overrun by Maráthás, was not a Marátha district; that it formed part of the Karnátak which was already under Madras and that the people were a portion of the same Kánarese nation who lived in Belári, Sunda, and Maisur, speaking the same language, and differing from them in no respect; that it would give more satisfaction to the people to be united to their own nation than to be transferred to a country of Marathas with whom they had no natural connection; and that this reunion of their nation as a permanent measure was entitled to more weight than the convenience of the Maratha chiefs who should continue to look to Poona and Bombay for redress; that as a rule the people

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the Court of Directors decided in 1830 that the Karnátak districts should continue to form part of the Bombay Presidency.

In 1830 (17th March) Regulation VII. of the Government of Bombay was passed bringing the Southern Maratha Country under the Regulations. The territories were formed into one collectorate, called the Dhárwár district or zilla. This included, besides this present district, parts of the present Belgaum, Bijapur, and Sholapur collectorates. In 1836 (28th April) Belgaum was formed into a separate collectorate, the Collector of Dharwar continuing to be styled Principal Collector.2 In 1839 (28th June), on the death of the chief of Nipani now in Belgaum, his estate was resumed by Government and thirteen villages in Annigeri were added to the Dhárwar district. In 1844-45 an insurrection broke out in Kolhapur and spread so rapidly that fears were entertained lest the Dhárwar fort might be seized. A force of militia or shetsandis was raised and by March 1845 quiet was restored without any serious disturbance. Between 1845 and 1856 public peace remained unbroken.

Disturbances. 1857-58.

On the outbreak of the Mutiny in 1857-58 the source of danger was entirely from the north and the east.5 In the north, Bháskarráo, or as he was more commonly called Bába Sáheb, the Brahman chief of Nargund, who was the most intelligent of the Southern Marátha chiefs and who had a library reputed to contain between three and four thousand Sanskrit volumes, conceived himself wronged by the British Government because he was not allowed to adopt a son. His estate, said to be one of the oldest possessions in the Bombay Karnátak (1560) and not like many held on service tenure, would, he knew, be absorbed by the British Government, and his widows be left to depend on their bounty.7 In the east, Bhimrao Nadgir, hereditary district officer of Mundargi, about ten miles south-east of Dambal, and the deshmukh of Surtur, about twelve miles south-west of Dambal, were known to be close friends and to have great influence in all the east and south of the present sub-division of Gadag; they also had grievances real or fancied. Between Nargund and Mundárgi, where Bhimráo's influence lay, the belt of patches of territory belonging to Rámdurg, Jamkhandi, Sángli, and Miraj, might at any time have become the gathering-ground for bodies of disaffected men belonging to these states. The Nargund chief and Bhimrao had

of the country above the Sahyádris greatly distiked going to the Malabár or western coast, but had no objection to go to the Coromandel or eastern coast, and as a consequence anative of Dhárwár would much rather come to Madrasthangoto Bombay; and lastly that as neither Madras nor Bombay could pay its charges without aid from Bengal, the Madras Presidency would, if Dhárwár were transferred to it, be able to answer all its demands without aid from Bengal, while if the transfer were made to Bombay, its resources would still be far below its expenditure and both presidencies instead of one would still be dependent on Bengal. Sir Thomas Munro's Minutes dated 5th May 1826, 27th June 1826, and August 1826, in Sir H. Arbuthnot's Life of Munro, II. 89-99.

1 Stokes' Belgaum, 85.

2 Stokes' Belgaum, 86.

4 Stokes' Belgaum, 86.

¹ Stokes' Belgaum, 85.
2 Stokes' Belgaum, 87.
3 Stokes' Belgaum, 87.
4 Stokes' Belgaum, 89.
5 The account of the mutinies in Dharwar is contributed by Mr. F. L. Charles, C.S. LeGrand Jacob's Western India, 226-227.

concerted a plan for a rising of the chiefs of Nargund, Rámdurg, the chief of Anegundi in Madras, and several smaller desais whose influence lay in the territory adjoining this part of the country. Their plans were greatly wanting in boldness and fixity of purpose. and, in spite of disquieting rumours, the whole of 1857 and the first five months of 1858 passed without any open act of treason. At this time the Collector was Mr. Ogilby and the Political Agent of the Southern Marátha Country was Mr. Manson. Mr. Manson was in the prime of life, intelligent, energetic, and decided. He had incurred much ill-will from his connection with the Inam Commission, but his frank and kindly disposition gave him considerable influence.1 The policy of these two officers seems to have been, while maintaining a watch over their movements, to conciliate and refrain from alarming the dangerous chieftains. As the Nargund fort was strong and stood on the top of a steep hill, it was deemed politic to ask the chief to send his heavy guns and stores of powder to Dharwar, on the plea that in the unsettled state of the country it was advisable to prevent the possibility of their falling into the hands of insurgents. The chief could not refuse this request without giving proof of disloyalty, and on the 7th of May 1858 all but three of his large guns and a large store of gunpowder and saltpetre were received in Dhárwár. The three guns were kept on the plea that heavy rain prevented the carts crossing the black soil between Nargund and Dhárwár. This attachment of his arms alarmed the chief and led him to suppose that his meditated treason had been discovered. Meanwhile, as it was known that Bhimráo of Mundárgi, Kenchangauda of Shirhatti and Hámgi, and the desái of Surtur had been concerting measures, the chief constable of Dambal was ordered to search Kanchangauda's house or fortified enclosure at Hamgi, a village on the Tungbhadra, twelve miles south of Mundargi. The chief constable found a large quantity of arms and warlike stores, sealed the house and set a guard over it, and reported the matter to head-quarters. On this Bhimráo, thinking further concealment useless, gathered about seventy men, attacked the guard, murdered the informant, and taking the stores marched with Kanchangauda and attacked the treasury at Dambal. Fortunately all the money had been sent to Gadag the day before and the insurgents gained but little. Their numbers increased to 300 or 400, and, though pursued by the superintendent of police, they made their escape towards Kopal in the Nizam's territories, where Bhimrao's family lived. They gained Kopal fort on the 30th of May. But word that they had left Dhárwár had been telegraphed to Belari, and, by the first of June, Major Hughes with the deputy commissioner of Raichur had collected a small force, and, after a rapid march, attacked and took Kopal, killing Bhimrao, Kenchangauda, and 100 men. This put an end to the insurrection in the east of the district. It afterwards became known that the attack on Kopal was part of

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Disturbances,

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¹ LeGrand Jacob's Western India, 221, 227.

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Disturbances,
1857-58.

a programme according to which the chief of Nargund was to attack Dhárwár and the west, while Bhimráo was to establish himself at Kopal where his family had influence. The news of Bhimráo's revolt was known almost immediately at Nargund, and the chief placed guns in position on his fort. On the 26th of May, after an interview with Brigadier-General LeGrand Jacob at Kolhápur, Mr. Manson when he heard of the threatening attitude of the Nargund chief went to Kurundvad twenty-five miles east In the hope of preventing further mischief; of Kolhápur. he moved with speed from Kurundvad to the threatened quarter, leaving his infantry escort and establishment behind, and taking with him only a dozen troopers of the Southern Marátha Horse. A letter which he had sent to Colonel G. Malcolm, commanding at Kaládgi, asking him to meet him at Rámdurg withs large body of the Southern Marátha Horse, did not reach Kaládgi till Colonel Malcolm had taken the field with 250 horse to attack the insurgents who had plundered the Dambal treasury. When Mr. Manson reached Ramdurg he had no protection but his own troopers.1 The chief of Rámdurg was cordial, supplied him with food, and showed him letters from Nargund urging him to rebellion. Death, wrote the Nargund chief, is better than dishonour. The chief advised Mr. Manson not to go to Nargund as the country was unsafe. In spite of remonstrances, on the afternoon of the 29th May, Mr. Manson set off in a palanquin to Dharwar to join Colonel Malcolm.² As the road from Ramdurg to Dharwar passed close to Nargund, and, as in addition to his small escort he had only a couple of horsemen, Mr. Manson's position was perilous. That night (29th May) he pressed forward about ten miles to Suriabund. At Suriabund he laid down in his palanquin which had been placed on the raised platform of a rest-house. Meanwhile the Nargund chief, who was greatly incensed by a letter which Mr. Manson had sent from Ramdurg and who feared that the Political Agent had full knowledge of his treasonable intentions, went towards Ramdurg with seven or eight hundred horse and foot. Hearing that Mr. Manson was at Suriabund, he turned aside and entered the village about midnight. He surrounded the village, approached close to the spot where Mr. Manson and his party were asleep, poured on them a volley which killed the sentry, and rushed in to finish the work with the sword. Mr. Manson, roused from sleep in his palanquin, fired his revolver at his assailants and wounded one, but was immediately overpowered, his head out off, and his body thrown into the fire that had been kindled by his party. Besides Puransing, one of the best officers of the Southern Maratha Horse, several attendants and bearers were killed, only half a dozen escaped in the dark. The chief returned to Nargund with Mr. Manson's head which he stuck on one of the gates of the town.3 As it is only thirty miles from Nargund,

Mr. Manson Murdered.

LeGrand Jacob's Western India, 223.
 LeGrand Jacob's Western India, 224.
 Bom. Gov. Sel. CXIII. 192; LeGrand Jacob's Western India, 221.

the news of Mr. Manson's murder reached Dharwar on the 30th of May. On the same day a small force sent from Dhárwár encamped at Amargol about four miles south of Nargund. This detachment was joined by Lieutenant-Colonel Malcolm's force of one nine-pounder gun, one howitzer, two companies of the 74th Highlanders, one company of the 28th Regiment of Nativo Infantry, and 150 of the Southern Marátha Horse. With these troops Colonel Malcolm appeared before the walls of Nargund on the morning of the 1st of June, and immediately proceeded with 100 horse to reconnoitre the fort. After reconnoitring the party retired, This movement was misunderstood by the seven hundred armed rabble which the chief had collected, and shortly afterwards they came pouring out towards the British camp. They were attacked and pursued by the cavalry who sabred them to within 500 yards of the town, inflicting a loss of upwards of sixty killed. Skirmishers were afterwards thrown forward under cover of the artillery, and by evening the town was taken with little loss and the troops were moved to the chief's palace. Early next morning a storming party wound up the steep path to the fort gates prepared to blow them open. They met with no resistance. The place was almost deserted, as many of the defenders had leaped over the precipice rather than face the storming party. The chief himself had fled as soon as his men began to retreat. Mr., now Sir Frank Souter, the superintendent of police in Belgaum, with a few horsemen followed his tract with extraordinary energy, perseverance, and skill, and, on the 2nd of June, found the chief with six of his leading followers, in the Torgal forest, disguised as pilgrims on their way to Pandharpur.2 He was taken to Belgaum, and was confined in the main guard of Belgaum fort. He was tried and sentenced to death. On the 12th of June he was carried on a cart drawn by Mhars through the town to Haystack Hill on which the gallows was raised, and was hanged before an immense crowd of spectators,3 His widows, unable to bear the disgrace, drowned themselves.4

Thus the disturbance was quelled. In addition to the two hundred men killed in action at Nargund and Kopal, forty persons of influence were hanged after trial, and about a hundred were sentenced to various terms of imprisonment and transportation. About a hundred of the armed rabble captured at Kopal and Nargund were shot by court-matial. Several pleaders in the Dhárwár Judge's Court and the názar or sheriff of the Court were suspected of having favoured the rebellion. The názar was convicted by the first court that tried him. Government ordered a second trial, and this court, consisting of two Europeans, was unable to find the complicity of the accused proved and all were discharged. Government pensions were granted to the widows and children of Bhimráo of Mundárgi and other persons of note who had been killed and whose estates were confiscated. A proclamation issued

1 Bom. Gov. Sel. CXIII. 193.

Chapter VII.

The British, 1818 - 1883. Disturbances, 1857-58.

² LeGrand Jacob's Western India, 222-26; Bom. Gov. Sci. CXIII. 192-93. Stokes' Belgaum, 91.

LeGrand Jacob's Western India, 226.

Chapter VII. History. THE BRITISH, 1818-1883. on the 3rd of June declared the state of Nargund forfeited to the British Government. When it lapsed to the British the state had forty-one villages of which seventeen were alienated, a population of about 22,700, and a gross yearly revenue of about £5000 (Rs. 50,000). Yearly allowances amounting to £130 (Rs. 1800) were bestowed on two of the nearest surviving relations of the rebel chief. The fort was garrisoned for a time by a few British troops which were soon withdrawn. It is now uninhabited. As the fort has an excellent supply of water, soon after the confiscation, a proposal was made that the water cistern and a few buildings should be kept in repair and the fort used as a sanitarium for Dharwar With this object the destruction of the cistern was invalids. countermanded. After confiscation the state remained for some time under the charge of the Political Agent of the Southern Marátha States, but was afterwards transferred to the Collector of Dhárwár. Since 1858 the public peace has been unbroken.

¹ Bom, Gov. Sel, CXIII. 194,

CHAPTER VIII.

THE LAND!

SECTION I.—ACQUISITION.

The lands of the district of Dharwar have been gained by cession, lapse, and conquest. Except the city of Dharwar which was ceded under the treaty of Poona (June 1817), most of the district fell to the British on the overthrow of Bajirav Peshwa in November 1817.2 In June 1821 the chief of Sangli, under articles dated the 12th of December 1820, ceded New Hubli, Taras, and Samat Bammigatti, instead of pay due to British troops. In 1837, on the death of the Chinchni chief, one village in Kundgol lapsed; in 1839, on the death of the Nipáni chief, thirteen villages in Annigeri lapsed; in 1842, on the death of the chief of the fourth share of the Miraj estate, eight villages in Lakshmeshvar lapsed; in 1845 on the death of the Soni chief, the village of Behatti lapsed; and in 1848, on the death of the Tasgaon chief, one village in Ingalhali and seventeen villages in Mulgand lapsed. In 1858, under a proclamation dated the 3rd of June 1858, five villages in Savanur, two in Badami, one in Saundatti, thirteen in Nargund, two in Navalgund, and two in Shirol were taken from the rebel chief of Nargund.

SECTION II.—HISTORY.

The earliest government whose influence on the system of land management remained at the beginning of British rule was the government of Anegundi or Vijayanagar, which, from about the middle of the fourteenth to the middle of the sixteenth century, 1933 to 1573, Chapter VIII: Land.

Acquisition, 1817-1858.

HISTORY. Anegundi. 1335 - 1573.

² The greater part of the present (1884) district of Dharwar became British territory under a Proclamation dated the 11th of February 1818.

¹ Materials for the Land History of Dhárwar include, besides a memorandum by the Survey Commissioner Colonel Anderson, November 1879, on the revenue history of Dhárwar, Mr. Elphinstone's Report dated the 25th of October 1819 (Ed. 1872); Mr. Chaplin's Report dated the 25th of August 1822 (Ed. 1877); East India Papers III. and IV. (Ed. 1825); Survey Reports in Bom, Gov. Sel. CXLVVIII. CLIV. CLV. CLVI. CLXI. CLXI. and the Survey Commissioner's Files of Hubbli Navalgund and Nargund Survey and Settlement Reports; Annual Jamábandi, Administration, Season, and other Reports and Settlements in Pow. Gov. Pap. Reports and Settlements in Pow. Gov. Pow. Pow. 111bil Navaigund and Nargund Survey and Settlement Reports; Annual Jamábandi, Administration, Scason, and other Reports and Statements in Bom. Gov. Rev. Rev. 74 of 1823, 95 of 1824, 123 of 1825, 167 of 1827, 549 of 1834, 627 of 1835, 771 of 1837, 866 of 1838, 972 of 1839, 1097 of 1840, 1238 of 1841, 1342 of 1842, 1451 of 1843, 1666 of 1844, 90 of 1861, 235 of 1862-64, 75 of 1866, 67 of 1867, 59 of 1868, 65 of 1869, 95 of 1871, 81 of 1872, 89 of 1873; Gov. Res. on Revenue Settlement Reports for 1873-74, Rev. Dept. 6092, dated the 27th of October 1675; Bom. Pres. Genl. Adm. Reports from 1872 to 1883; and the printed Acquisition Statement of the Bombay Presidency. Presidency.

Chapter VIII. Land. HISTORY. Anegundi. 1333 - 1573.

ruled the south and east of Dhárwár as far as the Krishna.1 The foundation of the system of assessment in force under the Bijápur (1573-1686), the Savanur (1686-1752), and the Marátha (1752-1817) governments, was laid during the reign of the great Anegundi. king Krishnaráya (1508-1542). With Krishnaráya and his minister Solu Appáji originated the unit of land assessment and measurement known as the raya-rekha or royal line, also called the hulmar or field-measure, which, on their assumption of power about 1570, the Bijápur princes took as the rakam or basis of their settlement. In the original Anegundi settlement dry-lands were alone measured and the survey even of the dry-lands seems not to have been completed. In 1833 in many parts of the west, bordering on the malnad or wet land villages, the land units bore peculiar names and varied considerably from each other. In 1833 Mr. Elliot noticed that a standard of the ráya-rekha-már, cut on a post in the gateway of the Gadag fort, measured 7 feet 9 to inches. Twenty of these units made a bigha and thirty-six bighás a ráya-rekha-már or royal-line plot of sixteen to eighty acres.2 A second unit standard line in the Basvana temple at Navalgund measured 7 feet 66 inches. Vithalpant a later governor introduced into many black soil villages a new unit of measurement, which, after his own name, he called the Vithalpanti mar. This standard, which was cut in the temples of Annigeri and Aminbhávi, and on a stone at Hebli, measured 10 feet 610 inches in the Annigeri temple, 10 feet 11 inches in the Aminbhávi temple, and 10 feet 6 inches on the stone at Hebli.3 The Vithalpanti plot may be roughly estimated to be equal to three raya-rekha-mars or royal-line plots that is it varied from forty-eight to 240 acres. Other Anegundi dry land measures were the patti or pole, the galla, and the chigga. Another probably an older dry land measure was the kulvan or hun kulvan, which in Mr. Elliot's opinion was originally the area which yielded one hun of rent.4

¹ Mr. Elliot, Sub-Collector of Hubli, 29th Oct. 1833 with Appendix. The sub-divisions of Dhárwár in 1833 were Dhárwár, Parasgad, Navalgund, Páchhápur, Dambal, Bankápur, Hángal, Hubli, Ránebennur, Kod, Sampgaon, Bidi, Chikodi, Bágalkot, Bádámi, Hungund, Indi, and Muddebhál. Of these five were under the sub-collector of Hubli, six under the sub-collector of Bágalkot, and the rest under the Collector of Dhármán. the Collector of Dharwar. Bom. Gov. Rev. Rec. 549 of 1834, 90-91, 238-239; Rev.

the Collector of Dharwar. Bom. Gov. Rev. Rec. 549 of 1834, 90-91, 238-239; Rev. Rec. 771 of 1837, 222.

Bom. Gov. Rev. Rec. 549 of 1834, 94-95. Relha also termed raya-relha, from raya the title of the Vijayanagar rulers, was the fixed standard assessment of the lands of the Karnatak according to a survey measurement and classification of the soils, and a register of the money rates of payment drawn up by order of the government of Vijayanagar in the reign of Krishnardya (1508-1542); the account was so arranged that the assessment of each plot of land was shown on a separate line, whence the term rekha a line or row. Hul-mair, the other name for the assessment, came from hola a field and mair a land measure varying from sixteen to eighty acres or 4 to 20 kurgis, the kurgi being the area a drill plough can sow in a day. Wilson's Glossary of Indian Terms, 210, 331, 443.

Mr. Elliot, Sab-Collector of Hubli, 1833, in Bom. Gov. Rev. Rec. 549 of 1834, 94-95. According to Mr. Elliot, Vithalpant was an Anegundi governor; according to Rev Bahddur Trumalray, he was a Bahmani (1343-1490) officer.

Mr. Elliot, Sub-Collector of Hubli, 29th Oct, 1833, Bom. Gov. Rev. Rec. 549 of 1834, 94-95. The hum was a gold coin current in the south of India. It was a pagoda usnally about 50 grains in weight, but of different standard and value accounting to the place where it was coined. The hum or star pagoda of the Company's currency was intrinsically worth 7s. 5d., but was rated in the public accounts at 8s. Wilson's Glossary of Indian Terms, 211.

Glossary of Indian Terms, 211.

Thus in Anegundi times, the dry land was assessed either on the measure of its actual extent by the raya-rekha standard or by some local measure, or it was estimated by the area to which the payment of a certain sum was attached, which was stated in huns or in fractions of hune. In the wet or malnud lands under the seed or bijvari system, the area of land was estimated by the number of khandis and kudus of seed required to sow it.1 According to Mr. Elliot this seed assessment also was part of the Anegundi land system. To fix the government share under the seed system, the rent was taken in kind for a series of years, the fees of village officers and all other charges were taken from the grain on the threshing floor, and the rest was divided into two equal shares, of which the landholder was allowed to take his choice. The average money proceeds of the government share formed the assessment on the area which the seed which produced the whole could sow? Gardens were estimated by the space occupied by a certain number of trees and were called thats or estates. In all the modes of assessment whether by the chahur of about ninety acres, the mar of sixteen to eighty acres, the local kulvan that is the hun rent unit, or the bijvari or seed system, the area of the unit of measurement varied according to the quality of the soil, while the amount which each unit paid was always the same.3 Thus Shiggaon in Bankapur had three mars or plots all assessed at the same rakam or rate. The first or standard mar for good soil was four kurgis that is sixteen to twenty acres, the second for medium soil was six kurgis that is twenty-four to thirty acres, and the third for poor coil was eight kurgis that is thirty-two to forty acros Unlike the other lands, the bijvari or seed system lands were further divided into classes paving different rates, and difference of rate was also sometimes found in dry land particularly in Clinkodis In 1816 the names of king Krishnaráya and of his minister Solu Appáji, by whom this system of assessment was completed, were still held in high reverence."

In 1573 the Anegundi possessions in Dharwar passed to Bujapur. Unlike other parts of Bijapur, where the land unit was the chilhur of about ninety acres, in Dharwar the different methods, which were introduced or completed by Solu Appáji about 1530, were continued." Though they adopted the Anegundi settlement, the Bijapur government were not satisfied with the share which the Anegundi system secured to the state. They increased the original share or rakam by cosses which were nominally introduced from time to time for special objects and to last only a short time but most of which in

Chapter VIII. Land. HISTORY. Anegundi, 1333-1573.

> Ryapur, 157**3 - 1**686 .

Born. Gov. Rev. Rec. 519 of 1531, 96. A Ladu of seed-land was considered equal to the fourth part of the chilhur. Ditto, 97.

to the fourth part of the childre. Ditto, 97.

Bom. Gov. Rev. Rec. 549 of 1834, 96.

Bom. Gov. Rev. Rec. 549 of 1834, 97.

Mr. Elliot, Sub-Collector of Hubh, 29th Oct. 1633, Bom. Gov. Rev. Rec. 549 of 1834, 97. In Hubli and Navalgund the usual local land measurer were mars containing four to cight or even twelve Juryls, a Luryl being the area which a drill plough could sow in a day. Captain Wingate, Surv. Supt. 25th Oct. 1814 pars. 32.

Bankapur Survey Report, 1816, Bom. Gov. Sel. CLV. 75.

Mr. Elliot, Sub Collector of Hubli, Bom. Gov. Rev. Rec. 519 of 1934, 96

Chapter VIII. Land. HISTORY. Bijapur, 1573 - 1686.

practice became permanent. An excellent village system known as the chali.1 apparently meaning either permanent or managing, enabled the Bijapur officers to increase the government share of the revenue without stopping the spread of tillage or impoverishing the landholders. The backbone of the Bijapur chali or lasting system was a managing body of village landholders called chálikars, who, in return for certain privileges and concessions, agreed to hold specially heavily assessed land, and, in addition, to be responsible for the balance of the village rental. Besides the social respect which attached to them as sharers in the village management, the chalikars were allowed to till waste and private lands on unusually favourable As any village landholder who rose to independence was freely admitted to be a chalikar, the system offered the ordinary landholder a strong inducement to thrift and forethought, and, as the body of chálikars was responsible for any failure in the village revenue, they were careful to see that the cultivation of the village did not decline. With this object they were active in bringing settlers, and ready to help needy or unlucky villagers with seed or with the loan of their ploughs, oxen, or servants.2

About the middle of the seventeenth century, when the power of Bijapur had grown weak and when the needs of the state forced its officers to raise their demands, the people of Dharwar grew discontented, and under local desais or hereditary land managers rose in revolt.3 Baylol Khán, the founder of the house of Savanur, who was sent from Bijápur to restore order, put down the revolt. At the same time he found that the state demands were pressing so heavily on the people that to secure order the revenue demands must be greatly reduced. In 1670 (H. 1080) during the reign of Ali Adil Shah II. the rates were revised, and a new standard was fixed which has since been known as the asal that is the original and also as the tankha a name apparently adopted from Shah Jahan's settlement of the north Deccan. Though the new rates were higher than the former Anegundi prime standard or rakam, all cesses were stopped and the whole demand under the new settlement was less than under the former settlement. In the disorders which had preceded this settlement, much arable land, especially in the west, had passed out of tillage. and large tracts were entered as jhád-khand or forest.4

Savanur. 1686 - 1759.

About sixteen years later (1686) when the territories of Bijapur passed to Aurangzeb, the revised settlement of 1670 was accepted as the basis of the Moghal collections. Along with the other Bijapur possessions south of the Krishna, which formed the three districts or sarkárs of Belgaum or Assadnagar, Torgal, and Bankápur, the lands of Dharwar were not managed direct by Moghal officers, but were continued to the chief of Savanur.5 On the establishment of the Nizám as an independent ruler in 1723, the allegiance of the Savanur

⁵ Bom. Gov. Rev. Rec. 549 of 1834, 91, 99,

¹ Bom. Gov. Rev. Rec. 549 of 1834, 97, 100.

Further details of the chdit village system are given under the Maratha period as the available information belongs to the Maratha rather than to the Bijapur period.

Bom. Gov. Rev. Bot. 549 of 1834, 98-99, and Rec. 698 of 1836, 52.

chief passed from the Moghal emperor to the Nizam. Still Savanur continued practically independent, till in 1752-53 (Fasli 1162) Peshwa Báláji Bájiráv (1740-1761) wrested from the Nawáb half of his territories.2 After the overthrow of Bijapur in 1686 the country was much disturbed, and, in spite of the lowering of the state demand, little improvement was made. A few years later Aurangzeb placed Abdul Rauf Khan in charge of the three districts south of the Krishna. With the help of his minister Ali Khan, this chief brought the waste under tillage by liberal leases or kauls. He kept the már, or sixteen to eighty acre plot, as the unit of measurement in the revenue accounts, but changed the rakam that is the fixed sum or standard, and styled his new rate, which included part of the cess revenue in addition to the original Anegundi standard, ainati that is the original standard assessment.3 In 1833 the people still remembered and praised the fairness and liberality of Alı Khán's settlement. This settlement did not last long. Under Hatim Khan the son-in-law and successor of Ali Khan, Ali Khan's rate or ainati in government land was doubled, the increase being styled a cess or patti. In private or inam lands the quit-rent was raised to a fourth or even a half of the full assessment.5 This enhancement of the government demand reduced the country to great distress.6 The detailed collection of the land assessment seems to have been left to local desáis who had to pay the Nawab a lump sum as tribute or peshkush. After Hatim Khan's time the ministers were Brahmans and one of them Khanderáv made great reductions in Hatun Khán's total. Still compared with the amount fixed in 1670 the assessment lovied by the Savanur chief between 1686 and 1752 was very high, the increase being due to the levy of extra cesses or izafa laufer which, at first levied as special and temporary, were continued as part of the regular demand.9

In 1752-53 (Fasli 1162), as already noticed, Peshwa Bálán Bánráv (1710-1761) forced the Nawab of Savanur to yield him half of his territory. As regards the management of the land the sixty-five years of Maratha rule in Dharwar (1752-1817) form two periods before and after the accession of Peshwa Bájiráv in 1796. During most of the first forty years of the first period of Marátha rule, the country was unsettled by the struggles between the Peshwas and Haidar Ali of Maisur (1762-1782). Even in times of public peace, in many parts of the district Maratha authority was limited to the levy of lump sums as quit-rent or tribute from local chiefs called either desais or Chapter VIII. Land.

TITTORY. Savanur, 1080 - 1752.

Marathás, 1752 1817.

¹ Compare Survey Supt. 445 of 25th October 1841 para, 22, and Bom. Gov. Rev. Rec. 549 of 1834, 91, 98-99.

² For details see Bom. Gov. Rev. Rec. 519 of 1831, 91. See also Bom. Gov Sel

CXIII. 208, 209, and Major West's Southern Maratia Country (1878), 22, 23

Rom, Gov. Sel. CLV. 76; Bom. Gov. Rev. Rec. 519 of 1831, 99.

Mr. Elliot in Bom. Gov. Rev. Rec. 519 of 1831, 99. According to atomic current in 1821 Alı Khân the Nawâb of Savanur let the lands at nominal rents, two pounds of butter and a horre bag or tobra full of grain for a field. In seven or eight years the whole waste was taken for tillage. East India Papers, IV. 790.

Bom. Gov. Sci. CLV. 76.

Bom. Gov. Rec. 549 of 1831, 99.

Bom. Gov. Sel. CLV. 76. Bom. Gov. B. Survey Supt. 115 of 25th October 1811 para. 22.

^{*} Bom. Gov. Rev. Rec. 549 of 1834, 99. ² Bom, Gov. Rev. Rec. 519 of 1831, 98.

Chapter VIII. Land. HIBTORY. Mardilds. 1762 - 1817.

Three grades of Marátha officers were employed in pálinárs.1 managing the country and gathering the revenue: A sarsubhedar or provincial manager, mambatdars also called amildars or divisional managers, and kamárisdárs or village managers. In 1752 Báláji Bhijray appointed as his provincial manager or earsubhedar Narayan Vyankatesh lehalkaranjikar whose chief divisional managers or amildárs were Yesijirav Hervádkar for Dhárwár and the west, and Rámchaudra Nániyan Huparikar for Gadag, Dambal, and the cast. This arrangement nominally remained undisturbed for nearly twentyfive years until Haidar Ali's conquest of Dharwar in 1777 (Fasti 1187). Under the Maratha's a sarsubhrdar's charge was a province yielding a yearly revenue of £20,000 to £30,000 (Rs. 2,00,000 -Rs. 3,00,000,5 When a sarsubledar or province manager, and this also applied to maildars or division managers, was appointed, the probable receipts and charges during the year were calculated and one-fourth of the estimated revenue was taken in advance. Before thearrangement was concluded, one per cent was taken off because the officer paid the instalment in advance, and a second deduction of one per cent was granted to make up to him for the premium he had to pay in sending money to Poons. Remissions on account of had seasons were promised, though in practice the government seem to have rarely remitted any of their claims on the province manager; the subhedies and amilders engaged to do their utmost to spread tillage, and promised to treat the landholders with moderation, and were warned that complaints of oppression would cause the serious displeasure of government. So long as he paid to the Peshwa the amount which was held to be the proper rent of his charge, the carsubledar was left practically independent. Under the sarsubledar came the subhedur, mamlatdar, or amildar. These officers were of three classes, holders on a lease from government, nominees of the sarsubhedår, and bankers who had advanced money to the sarsubhedår and were allowed to collect the revenues of a district with the powers of a mimiladdir till the amount advanced was realized. Before entering on their duties, which generally began in August, the mainlaiddre advanced one-fourth of the revenue as security. Under Nána Fadnayis (1763-1800) the mainlatdars or amildars, with the help of a jury or pauchait, had power to settle all disputes regarding contracts,

¹ Capt. Wingate, Survey Supt. 145 of 25th October 1844 para. 22. Few of the first twenty-five years of Maratha rule in Dharwar (1752-1777) were years of peace first twenty-five years of Maratha rule in Dharnar (1752-1777) were years of peace In 1762 Handar ranged Savanur and levicel tribute from the petty Maratha chiefs or publiquer. Maratha authority was restored in 1770. A few years later the struggle again began and ended in 1778 by the conquest by Haidar of nearly the whole country south of the Ghatprabha and Krishna. Between 1779 and 1786 most of the country was held by the Nawab of Savanur the ally and son-in-law of Haidar. The hestibity between the Nawab of Savanur and Tipu in 1757 ended in the transfer of Hubli and Navalgand to Tipu and the retrest of the Savanur Nawab to Poona. Tipu held the country destroying the power of the local chiefs or distif till 1790. It was then overrun by Parashuram Bhau and continued under Maratha management till 1818. Bom. Gov. Sci. CLVI. 86-87. Captain Wingate, Survey Supt. 25th October 1814 paras 22, 23, Bom. Gov. Rev. Rec. 549 of 1834, 90-91.

2 Bom. Gov. Rev. Rec. 549 of 1834, 92.

3 Survey Sant. 445 of 25th October 1844 para 25.

Both, Ohr, Rec. 1924 of Cost, 82.
 Survey Sapt, 445 of 25th October 1814 para 25.
 East India Papers IV. 786.
 Mr. Thackeray in East India Papers, IV. 791.
 Mr. Thackeray in East India Papers, IV. 791.

sales, and inheritance; to punish thieves except in cases deserving death or mutilation; and to fine up to £10 (Rs. 100). They had power to confiscate the private lands or inams of patils and kulkarnis; and they might add to or reduce the village rental. A mamlatdar or amildar superintended a division yielding £1000 to £10,000 (Rs. 10,000-Rs. 1,00,000). He fixed the rental due from each village according to the tillage area and the state of the landholders. distribution of the village rental among the village landholders was left to the village officers and to the kamuvisdur or government village manager. From their decisions the village landholders had the right of appeal to the mamlatdar and from the mamlatdar to higher authority.2 To the kamávisdár or villago manager was entrusted the duty of collecting the revenue and encouraging tillage. Their connection with the manlatdar enabled the kamavisdars to develop the resources of the country, but they were a badly paid body and usually spent more revenue than they brought to light, often made the villagers work for their private gain, and did mischief by meddling with the inner affairs of the village.3 They often so lowered the authority of the village headman or patil, that the headman's only care was to enjoy his allowance, pay his quit-rent, and act on the orders of the kamúvisdúr or village-manager.4 With the headman or pátil and the village clerk or kulkarni the manager arranged how much of the whole village rental each landholder should pay. Between the stipendiary divisional officers or amildars and the stipendiary and hereditary village officers, came the district hereditary revenue officers. These were the deshmukhs or desdis and the deslipandes whose Kanarese names, the deslimiths of nad ganda or district head and the deshpundes of nud shanbhog or nud kulkarni that is district clerk, explain the original nature of their duties. Their names show that the institution of horeditary district revenue officers dates from before the Musalmans. Their authority was confirmed and in some cases extended by the Bijápur government. Even under the Maráthás the deshmukhs and deshpandes were used, as they were used in the home or strictly Marátha Deccan districts, as a check on the amildars or stipendiary officers. They kept accounts of the tillage, produce, and revenue; encouraged poor landholders and recalled deserters. The position of Dharwar, the southern fringe of Bijapur, Moghal, and Maratha rule, gave a political importance to the hereditary district officers which they did not possess in the more settled Marátha Deccan districts. The frequent changes of rulers in Dhárwár raised the stronger and more pushing desáis to be independent or tributary chiefs. In times of trouble some of them were loyal to their overlord, driving out invaders and keeping the peace; others took advantage of disorder to found independent chiefships or samnáthárs. Among

Chapter VIII.

Land.

History.

Marathas,
1752 - 1817.

¹ East India Papers, IV. 798.
2 Capt. Wingate, Surv. Supt. 445 of 25th Oct. 1844, para 25; East India Papers, IV. 82.
3 East India Papers, IV. 782.
4 East India Papers, IV. 797.
5 East India Papers, IV. 788.

^{*} Colonel Wilks derived deshmulh from dasmukar or a tenth land-fort. Mr. Thackeray, 1821-22, East India Papers IV. 798, 'with more regard to the spelling of the word and to the Maratha way of collecting the revenue,' humorously traced it to das mulka or bule that is ten blows.

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the loyal desáis was the desái of Dhárwar, whom in 1696 the local Moghal governor made nad ganda or district head in reward for defeating the rebellious desail of Navalgund. Of rebel or independent desdis, besides the chief of Navalgund, are mentioned the chiefs of Shirhatti, Havkannar, and Dammat.1 Between 1787 and 1790 Tipu is said to have destroyed the power of the Marátha desais of the Dharwar district.2 The allowances of the noise quadris or district heads and of the add kulkarnis or district clerks were drawn from private villages and grants to enable them to maintain the honours of the gddi or cushion, the palkhi or litter, the chhatri or umbrella, and the chauri or fly-whisk. They also received fews in butter, in labour, and in grain, and cesses from craftsmen and shopkeepers. When they visited a village the people had to make them a present under the name of nazar.

DISTRICTS.

Fifteen public village terrants are mentioned, though the whole number were found in few perhaps in no villages. These village office-bearers were the patit or chief landholder who collected the revenue, tried to spread tillage, encouraged landholders, and carried out government orders; the kulkarni' or village clerk; the lohar or ironsmith, who made ironfield tools: the barbii or sular, the carpenter who made wooden tools; the dhobi or washerman; the hajiim or barber and anotherary; the talear or village watchman and guide: the bariki or crop-watcher who acted as the kamirisdar's servant: the dhor who supplied leather articles, cut grass and wood, swept yards, and carried baggage; the potder, who was a gold-mith or sondr and assayed the coins in the market; the mathapati or Linguyat bendle, who brought food to the people at the yearly rent settlement or jamabandi and entered for government officers when they came to the village; the pujári or village ministrant; the joski or village fortune-teller and astrologer; the hire mathedaiya or Lingayat priest; and in some villages the bagiculas who held festivals in honour of the gods. The village staff were known as birabaluties or the twelve sharers. According to some accounts the number twelve referred to the strength of the staff, the twelve being the patil, kulkarni, lohár, barhái or sutúr, dhohi, taleár, dhor, mathádhikári, hojám, báriki, mathápati, and poldár. According to other accounts they were called twelve sharers, because the sum allotted to them was divided into twelvo shares. The distribution was six to the dhor, one and a half to the lohar, sutar, and talear, and one-half to the hajám, dhobi, and báriki. When the village staff were to receive their shares of grain, the husbandman twice thrushed his crop. He thrashed it a third time, gathered the grain in a heap, and divided it among the staff. Sometimes the laudholder paid them so much for every plough or for every man in his family. In some places when the landholder began to sow, he divided fourteen pounds of grain (4 shers) between the lohar, sutar, and dher, and when he began to reap, the same three office-bearers went to the field and got

¹ Mr. Thackeray, 1821-22, East India Papers IV, 708-709.
2 Bom. Gov. Sci. CLVI. 86-87.
3 East India Papers, IV. 708.
4 Last India Papers, IV, 795, 801.
5 Mr. Thackeray derives Lullarni from the Kanarese Lul a landholder and Larnian account. East India Papers, IV. 795.

half as much grain and straw as each could carry. When the reaping was over, the village servants in some places went to the field and each got a horse's grain bag or tobra full of grain heads. When a landholder emptied his grain-pit, he left two or three grain bags full for the Dhor. In some villages the watchmen were each given a blanket. The coin-tester or poldar was paid one or

two pice for each pagoda assayed.2

In 1752 when Ichalkaranjikar the first Maratha provincemanager or sarsubhedár took charge, his first act was to remodel the assessment. The basis of the new assessment was the rakam or ainálí that is apparently Ali Khán's 1690 standard. At tho same time customary or mamul and extra or justi cesses raised the nominal total rental, the jama or berij, to double or troble the original standard.³ This total or berij was seldom realised and deductions were made for villages which could not afford to pay their full rental. The chali, apparently meaning the lasting or managing, Bijapur village system was continued. As has been noticed in the Bijapur period, the backbone of the chali system were the chalikars a class of responsible and privileged village landholders. The chall lands were supposed to take their name from the Hindustáni chal to go or remain with, because the holder was not allowed to throw them up. These lasting or chall lands were generally the best in the village and paid a special cess in addition to the regular rental. The holders of the lasting lands were further bound to make good any failure of the other village lands to pay their proper rent. The other arable village lands were hold under one of four tenures all of which paid something less than the full rental. These four short-rent tenures were: kattguta6 or short-rent lands which paid only the original standard or aináti without any or with few additions, and were usually, but not always, held by the lasting holders or chalikars to make up for the high rates they paid on the chall land; makta, also called khandmakta that is

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¹ East India Papers, IV. 796
² East India Papers, IV. 796. Of smaller perquisites chicfly enjoyed by the village headman and the village clerk, were a share in the customs recense; a due on every bullock-load of merchandise; the right to more than one house, to a sheep at Dusara. and to the Dhor's rervices as sweeper; in some villages a percentage on the recenue; a fee from money-changers and traders; fees from gardeners, wavers, and liquorallers; a mint fee; a dole of molasses on the Cobra's lifth or Mappanchum, a prequisite from things sold in the market, from oil, and from cattle; the right to have a jucket washed; a supply of stationery; and a marriage fee. East India Papers, IV.

^{796 -797.} 3 Bom. Gov. Rev. Rec. 549 of 1834, 99; Survey Supt. 445 of 25th October 1844 para It is not certain whether the Anegundi ralam or Ali Khan's amati was adopted as the basis of the new assessment. The passages in the original run, 'All the lands under cultivation were entered in each landholder's name at the aindi or standard

under contivation were entered in even innonmer a time at the ainag or structure in only, this being generally the old radium or raya rethaussessment. Mr. Elliot, 1833, Rev. Rec. 519 of 1831, 101. 'The assessment was made up of the radium or ainati that is the original standard rate, the mainul path or enstomacy cess, and the justification of the radium of the path of the radium of the radiu or complimentary presents cost when a now manager came to a district. In addition to the country presents cost when a now manager came to a district. In addition to the constonary costes, special costs were levied on particular occasions. Mr. The keray in East India Papers, IV. 788. Bom. Gov. Rev. Rec. 519 of 1831, 100. Kattagattagai, corruptly Latigata, is land held in farm at a pernamently fixed money rent which is usually light. Wilson's Glossary of Indian Terms, 270.

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agreement lands, generally arable waste taken for tillage which never paid more than the original standard or aindti assessment; hursul or paikari, light-rented lands which could be held only by chálikars; and kaul or lease land also light rented and a perquisite of the chalikars. It was chiefly because the chalikars had the uncontrolled power of arranging for the tillage of the light rented paikári and lease or kaul lands that they were able to bear the burden of making good any shortcoming in the village rental. In fixing the village rental the lands were entered in the holders' names at the aindtí or original standard, that is, apparently, Ali Khán's standard which was introduced about 1690. Apart from enhancements due to the greed and the necessities of Marátha rule, the fall in the value of money, between the middle of the sixteenth and the middle of the eighteenth century, had made the original Anegundi rental represent a much smaller share of the produce than the state had a right to claim.² In any year to fix how much of Ichalkaranjikar's berij or total rental a village could pay, the public officers examined former collections and other records and, with the consent of the permanent holders or chálikars, fixed a sum in addition to the aináti total. addition was called the cess or patti. It was generally known as the manul or customary cess as opposed to the extra or jasti pattis which were being constantly levied as special charges but always tended to become permanent demands. The customary cess was fixed in proportion to the ainati or standard rental of the permanent holders or chalikars. The customary cess sometimes amounted to as much as and sometimes to double the original standard. Strictly no one but a chálikar should have been called to pay the customary cess. Occasionally short-rent or kattguta holders who were not chalikars paid, according to their means, a cess or patti, a quarter of, or a half of, and in all cases something less than the customary cess paid by the Though the customary cess or manul patti was a regular and admitted charge, the amount was never entered in the village accounts.3 Lands held by ordinary villagers, without paying any part of the customary cess, were called contract or makta lands. Except lease or kaul land no land paid less than the regular standard or aináti. As the chálikars had to make good any failure in the village rental they took care to prevent the tillage from declining. They kept landholders from leaving the village, persuaded new men to join it, helped newcomers or unfortunate villagers by advances of seed or by granting them the use of their oxen and servants, and, to induce them to bring arable waste under tillage, till the field was in working order, gave them leases on easy terms known as haryáli kauls that is grass-clearing leases. When with this or similar help or by his own exertions a villager was established as

Rec. 549 of 1834, 103-104,

¹ Mr. Elliot, 1833, Rev. Rec. 549 of 1834, 100-101; East India Papers, IV. 782.

² Born. Gov. Rev. Rec. 549 of 1834, 101. In consequence of the working of the rich South American gold and silver mines (1545), between 1570 and 1640 the price of corn rose in Europe from about two to six or eight ounces the quarter. During this period Mr. Hume makes the general rise in European prices threefold or fourfold. Walker on Money, 135. See East India Papers, IV. 426 and Rev. Rec. 117 of 1825, 489.

³ Mr. Elliot, 29th October 1833, writes, 'I have hardly seen one tillage paper before the Maisur conquest in 1778, in which the mamul patti was shown.' Born. Gov. Rev. Rec. 549 of 1834 107, 104.

an independent holder, he was allowed to share in the gains and the risks of a chálikar. If a chálikar through ill-health or ill-luck failed to pay his share, he was charged only standard or a little over standard rates. If he could not pay even standard rates, some of the chalikars advanced the amount on his account and were repaid the advance by instalments. The class of leading or managing landholders or chalikars was found both to the north and the south The system to the north of the Krishna was more of the Krishna. exclusive than the system to the south of the Krishna. In Indi and Muddebihál, now in Bijápur, the chálikars all belonged to the head or patil family. They divided the village into shares or bhage and each became responsible for the rental of one or more shares. The constitution of these villages to some extent resembled the sharehold, called bhágdári and narvádári, villages of central Gujarát. In the lands to the south of the Krishna the constitution of the village was more democratic. They were more like the villages of the Madras Karnatak where the whole body of landholders had a share in the management of the village. Any man who rose to be an independent landholder, was allowed to join the managing body of The privileges of a chalikar in the north Krishna villages differed from the privileges of a chálikar in a south Krishna village. In the northern or more exclusive villages, in proportion to the amount of heavily assessed and responsible chali land which he held, the chalikar was allowed to hold rent-free land called sarv inam or wholly alienated; if he reduced the amount of his stake in cháli land, he forfeited a corresponding share of his rent-free land.3 In the less exclusive south Krishna villages where any landholder might be admitted, the position of a chalikar was much sought after. Among the gains which overweighed the risks of a chalikar's position, were that the best lands and the best houses in the village could be held only by chalikars; plough leases or nangar kauls for breaking long waste land were granted only to chálikars; the right of letting inamorprivatelands, which were always rented on lighter terms than government land, was confined to chalikars. As the fulfilling of the duties of a chálikar carried with it the respect of the villagers, so a chálikar, who through his own fault failed to fulfil his duties. was shunned and despised; a special house-tax was levied from him and he was liable to lose his privilege of grazing cattle on the village waste or of tilling private or inam lands. In bad years it was usual for the Marátha officers to forego part, an eighth, a quarter, or a half, of the customary cess. Except in very extreme cases the district manager had to pay the full amount to the provincial manager. and granted these remissions only on the understanding that the

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Mr. Elliot, 1833, Bom. Gov. Rev. Rec. 549 of 1834, 105.
 Mr. Elliot, 1833, Bom. Gov. Rev Rec. 549 of 1834, 102, 105.
 Bom. Gov. Rev. Rec. 549 of 1834, 104.

⁴ Brahmans, Musalmans, and other holders of village grant or indn lands were forced to allow the friends of the village headman to till their lands at low rents. If the proprietor let his land to any one else the tenant was not allowed to till it. Mr. Thackerry, 1821-22, East India Papers IV. 801. A common origin of village grant or india land was to the relations of those who had lost their lives in village boundary fights. Ditto, 795.

Captain Wingste, Survey Supt. 415 of 25th October 1841 para 28.

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amount forgone would be recovered in the next scason. The police of the country were the village militia or shetsanadis who also carried letters and served summonses. When employed beyond the limits of the district, they were entitled to an allowance of 11d. $(1 a.) a day.^2$ The sarsubhedár, when he reached his district and made the rent settlement or jamábandi, fixed how much each amildár was to collect, and the amildár fixed how much in each village the kamávisdár or in some cases the village headman and the village clerk were to collect.3 In fixing the rental of the village, the mámlatdár with the help of the village manager or kamávisdár, the village head, and the village clerk, found the area under tillage and compared it with former rentals and the state of tillage in the last year, and on this fixed the standard rental or aináti, the customary cess or manul patti, and the extra cesses and additional items for nemnuk or fixed allowances and sádilvár or contingent expenses. From this estimate the village manager, the village head, and the village clerk, fixed what share each landholder was to pay. From the amount to be realized they took the amounts which were to be spent in the village in nemnuks or fixed allowances and in sádilvár or contingent charges, and handed over a statement of the remainder. In a village most of whose arable land was under tillage, the whole rental was levied; in a village with much arable waste, reductions had to be made. The village manager or kamavisdar examined into the actual state of tillage. If he found much less land under tillage than had been supposed, a certificate was taken from the village headman, the clerk, and the leading landholders, and a remission was granted in the last payment, and an equal remission was made by government in the subhedár's favour. The landholders paid their rents through the village-headman and clerk. If a landholder from death, flight, or beggary, failed to pay, at the end of the year the manager either levied the amount from other landholders if the village was populous, or, if there were few landholders, he remitted the amount and the sarsubhedar confirmed the remission.4 Except in the case of a few villages in the extreme west of the district where the crop was uncertain, in one year wet, in another year dry, and no rate could be fixed, the Maratha land revenue was taken in cash.⁵ It was sometimes taken by a bill from a moneylender or shroff; sometimes in detail in cash from the landholders.6 The coins in which collections were usually made were Dhárwár pagodás in Dhárwár, Navalgund, Hubli, Mishrikot, Betgeri, and Belgaum; Pirkháni rupees in Chandgad and Kalánidhigad; Sikka rupees in Bágalkot and Bádámi; Jeary (?) pagodás in Alsor, Kod, Bankápur, Gutal, Hángal, Kágnelli, Ránebennur, and Dambal; Sikka, Chándvadi, and Ankushi rupees were received in Bijápur. Other coins were taken at their market value.7

The revenue was collected from the landholders by weekly instalments.8 The proportion in which a black soil village, whose whole

Mr. Thackeray, 1821-22, East India Papers, IV. 793; Mr. Elliot, 1833, Bom. Gov.
 Rev. Rec. 549 of 1834, 104.
 East India Papers, IV. 787.
 East India Papers, IV. 789-790.
 Mr. Thackeray in East India Papers, IV. 785.

According to Mr. Thackeray (East India Papers, IV. 794) it was usual to take a

bill for the assessment from a shroff, 7 East India Papers, IV. 792. ⁸ East India Papers, IV. 794.

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rental was £10 (Rs. 100), paid, was £1 (Rs. 10) from the 26th of October to the 26th of November, £1 (Rs. 10) from the 25th of November to the 26th of December, £1 10s. (Rs. 15) from the 25th of December to the 23rd of January, £1 10s. (Rs. 15) from the 24th of January to the 21st of February, £1 10s. (Rs. 15) from the 22nd of February to the 30th of March, £1 10s. (Rs. 15) from the 3rd of April to the 1st of May, £1 (Rs. 10) from the 2nd of May to the 31st of May, and £1 (Rs. 10) from the 1st of June to the 19th of If any arrears remained, they were collected in September and October, and the monthly instalments were made up by weekly collections. In a red soil village yielding £10 (Rs. 100) the proportion was £1 (Rs. 10) in October, £1 (Rs. 10) in November, £1 10s. (Rs. 15) in December, £1 10s. (Rs 15) in January, £1 10s. (Rs. 15) in February, £1 10s. (Rs. 15) in March, £1 (Rs. 10) in April, and £1 (Rs. 10) in May. Arrears were collected in August and Septem-The instalments due from the kamávisdár or village manager to the amildar or division manager were for black soil villages yielding £100 (Rs. 1000), £25 (Rs. 250) in advance in August, £27 (Rs. 270) in November, £10 (Rs. 100) in December, £15 (Rs. 150) in January, £15 (Rs. 150) in February, £10 (Rs. 100) in March, £17 (Rs. 170) in April, C5 (Rs. 50) in May, and £5 (Rs. 50) in June. In red soil villages yielding £100 (Rs. 1000) the proportion was £25 (Rs. 250) in August, £7 10s. (Rs. 75) in October, £10 (Rs. 100) in November, £15 (Rs. 150) in December, £15 (Rs. 150) in January, £10 (Rs. 100) in February, £7 10s. (Rs. 75) in March, £5 (Rs. 50) in April, and £5 (Rs. 50) in May. The amildar paid the sarsubhedar or province manager a quarter of the collections in advance in August, and paid the rest by instalments within fifteen days after each receipt from the kamávisdár. The sarsubhedár paid the Peshwa about a quarter of the revenue or a bill for a quarter of the revenue in advance in August. If the Poshwa required an advance for the rest, he borrowed it from the Poona bankers, and gave them an order on the sarsubhedår, which the sarsubhedår discharged by six monthly instalments, beginning in January and ending in June. Afterwards in Bájiráv's time the kamávisdár and others collected the assessment in the same way, except that when the landholder was a man of substance two or three instalments were sometimes collected at once; also the manner of payment from the kamávisdár to the amildár and from the amildar to the sarsubhedar was the same. The sarsubhedár advanced a quarter to the Peshwa; or if he was a man of substance, and the Peshwa wished it, he paid the whole by instalments within eight months beginning in November and ending in June. Frequently the sarsubhedár lived at Poona in which case he received the assessment from the amildar in bills.3

The chief change between the system of land management during the first (1752-1796) and the second (1796-1817) periods of Marátha rule, was the introduction by Bájiráv in 1796 of the system of farming the land revenue. For the first five or six years of Bájiráv's reign the revenue was farmed at a fixed rent, the farmers taking all

⁴ East India Papers, IV. 790. - Last India Papers, IV. 790-791. The total of these items is Rs. 1290 instead of Rs. 1000. Mr. Thackeray, 1821-22, East India Papers, IV. 791.

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The country was full of disorder; the mamlatdars failed to put down disturbances, and the troops sent from Poona to restore peace proved a grievous burden to the people, in some cases ruining and plundering the villages they were sent to guard; the landholders were impoverished and large tracts fell waste. In the early years of the nineteenth century these evils were increased by farming the revenue to the highest bidder. The new farmers cared nothing for the state of the country; their one object was to realize more than they had paid. With this object the head farmer, who was often a Poona courtier, sublet his farm to another, who went to the district, sent to the original farmer the share he had promised, and proceeded to collect as much as he could by subletting groups of villages and even single villages.1 The village managers or the village farmers in fixing the sum to be recovered from a village no longer compared former payments and present tillage or attempted to distribute the amount due in accordance with the paying power of the different landholders. The revenue farmer called villagers whom he knew to be at enmity with each other; and empowered any one of them to collect the rental who agreed to raise the required sum.2 The villager or the under-farmer, who undertook to collect the village rental, paid no attention to the different tenures under which the lands were held or to the rights and privileges of the landholders. He was guided solely by interest and caprice. If the oppressed landholder complained he received no redress.3 In the beginning of the year only a small rental was asked but when the landholders had sown their fields and could not leave, heavy additional sums were exacted.4 The landholders were unable to pay; and the keep of the duns was added to their other burdens. They had to borrow from moneylenders, were ruined, and forced to leave their villages. Every year the area under tillage shrank.5 In the last years of Bájiráv's reign the Bombay Karnátak was a prey to a rapid succession of revenue farmers. When a new farmer came, he had often to drive out the last farmer by force. As soon as he had the country to himself, the farmer lost no time in making good the amount he had paid in Poona. Rapid and heartless exaction was the farmer's only safeguard from loss as at any moment his successor might be on his way from Poona. There was little inducement even to maintain public order, and the district, especially Kod and other remoter

East India Papers, IV. 785, 788.
 East India Papers, IV. 786.
 In the agreements between Bajirav and the revenue farmers, the former provision enforcing moderation on the part of the revenue callectors was left out (East India Papers, IV. 786-787) Under Bájiráv the great farmers lived in Poona and had agents or kárkuns in Dhárwár. If a complaint was brought against one of the underfarmers, he bought over the local agent. In this way the under-farmers were able safely to practise the most glaring oppression. The landholders were harassed by the perpetual fear of exactions. Even if their crops were seized, they had no redress, East India Papers. IV. 800.809 East India Papers, IV. 800-802.

^{*} East India Papers, IV. 786. These exactions took the form of fresh cesses. Besides the old cesses there are mentioned a number of tut or deficiency cesses levied nessues the oid cesses there are mentioned a number of tut or desiciency cesses levied to make up for defalcations; tashrif or a clothes cess for the farmers; darbar kharch to travelling officers of state; glass dana grass and grain to buy off an enemy; shibandi or militia cess; galla-tota or crop-share deficiency cess. There were many other cesses on special articles, a cattle cess, a butter cess, and others. Lastly, there was a jast saddibar or fresh contingent cess to meet the expense of persons sont to receive debts. Mr. Thackeray, 1821-22, Last India Papers IV. 788.

5 East India Papers, IV, 786.

parts, was overrun by freebooters.\footnotes! During these years of suffering large numbers of landholders fled to Maisur; village clerks retired with their accounts to other districts, and all rules settling the assessment were forgotten. The hereditary village and district officers who remained, taking advantage of the confusion, seized large areas of government land to which they had no claim.\footnotes

SECTION III.—BRITISH MANAGEMENT.

From the acquisition of Dhárwár in 1818 till 1843 the Marátha assessment remained without revision. During the first ten years of British rule a survey was attempted and the measurements were to a small extent adopted, but no revision of assessment was carried out.3 During the first twenty-five years of British rule, 1818-1843, the principal features of the land-rent settlement were a very high nominal demand and large remissions granted every year after an inspection of the crops. The assessment was exceedingly unequal both on whole villages and on individual holdings. Little that was in the smallest degree trustworthy was known about the areas of individual holdings. Natural boundary marks were rare and artificial boundary marks were unknown. The old land measures were not area measures but seed or bijvari' measures, that is the area which a certain quantity of seed was estimated to sow. In each village the assessment on the unit was the same but the unit varied in area according to the supposed productiveness of the land.5 Before the survey settlement was begun in 1843-44 less than half of the arable Government area was held for tillage. The rest was waste. Large sums were remitted or left outstanding. During this period Indian milletor jrári prices at Dhárwar fell from 50 pounds tho rupce in 1819 to 102 pounds in 1842.6 In 1843-44, when the survey settlement was introduced in thirty villages of Hubli, the occupied

³ Col. Anderson, Surv. Comr. 6th November 1879.

The details are : Dharwir Indian Millet Prices, 1517 - 1842

Year.	Pounds the Ruper.)		Potenta and Bodel					
	Hubii	Naval. gund	Han- gal.	Kođ.	Dhir- war.	Yran.	Habli	Naval-	Hán- gal.	Kod	Dhir- war.		
1817 1918 1819 1820 1821 1821 1823 1826 1827 1825	80 95 80 71 83	.55 60 60 61 70 61 72 70 130	150 103 176 160 151 137 153 170 157 144 123 170	00000000000000000000000000000000000000	103	1830 1831 1542 1544 1845 1845 1847 1837 1837 1839 1810 1841 1542	44 40 40 40 40 40 40	80 75 60 40 40 45 45 47 60 70 70	120 144 54 74 52 108 121 172 101 100 101 109 112	185 169 22 90 105 100 161 167 169 213 190 172 108	241 243 243 125 160 166 147 109 210 210 211	98 105 129 64 60 111 90 90 102 78 102 120	

Compiled from Survey Reports.

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THE BRITISH, 1818-1884.

¹ Bom. Gov. Sel. CLX. 89; Bom. Gov. Rev. Rec. 549 of 1834, 85-86.

² Mr. Thackeray, 1821, East India Papers IV. 798; Bom. Gov. Sel. CLX. 89. An examination of the registers of grant or indu lands at the beginning of the Maratha rule showed that great additions had been made between that time and 1833. Bom. Gov. Rev. Rec. 549 of 1834, 86.

^{**}Bijdeari or bijeari means extent of land computed according to the quantity of seed required to be sown in it. Wilson's Glossary of Indian Terms, 86.

**Col. Anderson, Surv. Comr. 6th November 1879.

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The British, 1818-1884,

area was even less than in the preceding year. Owing to the introduction of lower rates under the survey settlement, during the seven following years, compared with the year before the survey settlement, in spite of an increase in tillage, the collections in the settlement year showed a fall of about thirty per cent. In 1850 when the survey settlement was completed, the occupied area was a little less than two-thirds of the whole arable area, remissions had fallen to £18 (Rs. 180), and at the close of the year only £4 (Rs. 40) were outstanding. Two years later in 1852-53 the revenue under the survey settlement for the first time exceeded the revenue in 1842-43 the year before the survey settlement was begun. Since 1852-53, except during the famine of 1876 and 1877, the progress of the district under every head has been rapid and unbroken. In 1882 the occupied area was more than double what it was in 1848-44. and comprised more than nine-tenths of the whole arable area of the district. Remissions and outstandings had practically ceased. The collections had risen from £104,986 (Rs. 10,49,860) in 1843-44 to £142,807 (Rs. 14,28,070) in 1873-74 or 36 per cent, and arable waste had fallen from 769,376 to 115,328 acres or 85 per cent. During the thirty-two years ending 1874 Indian millet prices at Dhárwár rose from 123 pounds the rupee in 1843 to 41 in 1874, an increase of 180 per cent. At the end of thirty years, that is in 1874-75, the revision of the 1843 survey assessment was begun, and by 1880-81 the 1173 villages of the district were brought under the revised assessment. During the seven years ending 1881 the only large remissions were £635 (Rs. 6350) in 1876-77, and the only large outstandings were £3732 (Rs. 37,320) in 1876-77 and £3480 (Rs. 34,800) in 1877-78. These were due to the losses in the 1876-77 famine which caused severe suffering especially in the east of the district. The rupee price of Indian millet at Dharwar was 50 pounds in 1875, 47 in 1876, 14 in 1877, and 23 in 1878.2 close of 1881-82 the collections amounted to about £190,000 (Rs. 19,00,000) or nearly double what they were before the survey

1 The details are :

Dhártear Indian Millet Prices, 1843 - 1874.

				POUNDS THE RUPPE.								
YEAR,	Hubli Naval		Hán- gal.	Rod.	Dhār- war.	Year.		(Iabiı	Naval- gund.	llán- gal,	Kod.	Dhar wár.
1813 1844 1845 1846 1847 1849 1850 1852 1853 1854 1855 1855 1856 1858	111 132 144 96 84 96 102 121 162 108 191 83 71 88 88	120 120 184 128 218 130 176 102 128 93 76 94 94	235 239 238 193 180 102 132 356 172 160 320 144 120 104 112 98	243 243 243 243 324 320 320 320 320 320 320 320 320 320 320	111 120 126 144 148 116 140 02 76	1880 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1870		77 50 47 49 21 29 28 11 45 77 59 50 40	94 82 48 48 22 24 21 22 24 51 68 51 40	100 112 100 48 44 40 44 48 56 100 104 48 64 48	212 208 128 76 36 38 40 82 82 82 98 146 72 72 72 72	100 96 84 60 44 20 28 22 52 52 84 96 44 56 39 43

² Bom. Gov. Sci. CLXI, 20. Compiled from Survey Reports.

settlement was introduced. This enhanced revenue was raised on a tillage area more than double the area held for tillage before the survey settlement, and with Indian millet prices averaging more

than double the prices of 1810.1

At the beginning of British rule the revenue farming system was stopped and in its stead the personal or rayatrar, then known as the Madras system, was introduced.2 The ruin which Bajiray's revenue farming had wrought in the district, made the introduction of a personal settlement a work of very great difficulty. There was no record of individual payments. In many cases the village accounts had been removed to distant places of safety, in others they had been destroyed, and in other and far more numerous instances the account holders kept them back because they knew that the accounts would bring to light many usurpations on the part of hereditary district and village officers. The only documents forthcoming were general accounts, called tálebands and patraks, of the assessments imposed in the years before the conquest. These generally showed little more than the sums imposed on villages or village groups without specifying the detailed assessment paid by individual holders or by particular fields. Even such information as they gave was of little value as it belonged to a time of exaction and oppression. As this was the only available information, the assessment had to be fixed on what seemed as nearly as possible to be average rates. In addition, the performance of many services and the supply of various articles were turned into money payments and added to the rental or jama. The anxiety which the village officers showed to withhold their accounts, raised the suspicion that their object was to turn some hidden revenue to their private advantage. To prevent this, under the name of munasab jasti or fitting enhancements, arbitrary additions were made to the village rental or jamábandi, and the landholders were left to arrange their shares among themselves. These fitting enhancements were never realized. Heavy outstandings in 1820-21 and 1821-22 showed that the assessment had been fixed at too high not at too low a

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¹ The rupee price of Indian millet at Dharwar was 102 pounds in 1840, 50 pounds in 1875, 23 pounds in 1878, and 46 pounds in 1880. Bom. Gov. Sci. CLNI. 20.

² 'All the Collectors abolished just, pattie or arbitrary taxes having no reference to

^{2&}quot; All the Collectors abolished pip", paths or arbitrary taxes having no reference to all exactions on that account, more than were necessary for the village expenses. All paid great attention to the circumstances of the rayate, and made their assessment studiously light. There were, however, some points of difference in their proceedings. Mr. Chaplin in the Karnatak and Capt. Grant in Satura contented themselves with ascertaining the extent of the land under cultivation, by the information of neighbours and of rival village officers, aided by the observation of their own servants. Capt. Pottinger in Ahmadnagar and Capt Robertson in Poona had the lands of some villages measured but only in cases where they suspected fraud; and Capt. Briggs in Khandesh began by a measurement of the whole cultivation. All the Collectors kept up the principle of the rayated settlement and some carried it to a greater extent than had been usual with the Maráthas. Mr. Chaplin, after settling with the path for the whole village, settled with each landholder and gave him a paths or agreement paper for his field. Captain Grant and Captain Robertson settled with the path and captain pares him a path, but first a secretained the amount assessed on each rayat and enquired if he was satisfied with it; and Captain Briggs, though he settled for each field, did it all with the path, taking an engagement from him to explain at the end of the year how much he had levied on each rayat.' Mr. Elphinstone, 25th October 1819, Edition 1872, 32.

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1818 - 1821.

figure. To remedy this evil Mr. Thackeray, who was then Collector. proposed that a fresh survey and settlement should be started. On the establishment of order large numbers of the landholders returned who had fled from Maratha oppression to Maisur.2 To ensure their settling to tillage and to tempt others to follow their example, arable waste was granted on liberal leases or kauls. These specially low rented lands and the remissions granted at the yearly village rent settlement or jamabandi, prevented the actual demand rising to more than one-half of the nominal total survey rental or taram asessment.3

In 1818 the British district of Dhárwár was about 240 miles long and seventy to 150 miles broad, and included 2152 villages and 285 hamlets.⁶ In 1818-19 of a gross revenue of £239,454 (Rs. 23,94,540) a net revenue of £220,014 (Rs. 22,00,140) was realised. In 1819-20, including the trade or moltarfa and other taxes, the land rent amounted to £235,423 (Rs. 23,54,230), excise or abkári yielded £3825 (Rs. 38,250), and customs £14,900 (Rs. 1,49,000), that is a total revenue of £254,148(Rs.25,41,480).7 A variety of claims amounting altogether to £31,150 (Rs. 3,11,500) reduced the revenue to £222,998 (Rs. 22,29,980).8 From this the expenses of administration, amounting to £76,663 (Rs. 7,66,630), left a net revenue of £152,151 (Rs. 15,21,510). Of £222,998 (Rs. 22,29,980) the revenue for collection, £222,401 (Rs. 22,24,010)10 were collected and £597 (Rs. 5970) were left outstanding at the end of the year 1819-20. According to orders issued in 1819-20, the proportion in which the land assessment was to be paid was in the case of a red-soil village yielding £1 (Rs. 10), 3s. (Rs. 1½) to be paid within fifteen days after September 25th, 4s. (Rs. 2) within fifteen days from October 26th, 5s (Rs. 21) within fifteen days from November 25th, 4s. (Rs. 2) within fifteen days from December 25th, 2s. (Re. 1)

Bom. Gov. Rev. Rec. 549 of 1834, 86-88. ² Bom. Gov. Sel, CLX, 89.

³ Captain Wingate, Surv. Supt. 554 of 20th September 1845, about Dambal; Bom. Gov. Sel. CLIV. 74 - 75.

⁴ The territory since obtained from the Nizam in the Kolhapur division was about

^{**} The territory since obtained from the Rizam in the Romapur division was about seventy-five miles by twenty. East India Papers, IV. 776.

** East India Papers, III, 792.

** East India Papers, IV. 321. In 1819-20 of a gross revenue of £239,146 (Rs. 23,91,460), the net revenue amounted to £222,988 (Rs. 22,29,880) or an increase over the previous year of £2974 (Rs. 29,740). East India Papers, IV. 776.

** The details of the claims are: Lands held by the police militia called shetsanadas or shings dis £15,002 (Rs. 15,000). The details of the police militia called shetsanadas.

The details of the claims are: Lands held by the police militia called shetsanadas or shibandis £15,002 (Rs. 1,50,020), moktsa and other rights enjoyed by proprietors and others £785 (Rs. 7850), rights of hereditary district officers £4950 (Rs. 49,500), rights of village officers £3370 (Rs. 33,700), allowances to temples and mesques £438 (Rs. 47,380), annuities or varshinans £1632 (Rs. 16,320), village expenses £628 (Rs. 6280); total deductions £31,150 (Rs. 3,11,500). East India Papers, IV. 321-322.

The charges ware: Head-quarters office and contingent that is huzur-lacher and sidilvár £17,817 (Rs. 1,78,470) or seven per cent; asham or shibandi peons £33,330 (Rs. 3,33,300) or thirteen per cent; irregular horse £6983 (Rs. 69,830) or two per cent; iduka shibandi and sadilvár £3067 (Rs. 90,670); exta charges £1099 (Rs. 10,990); pond repairs £181 (Rs. 1810); pensions £117 (Rs. 1770); Shrávanmás or Angust allowances £978 (Rs. 9780); annuities or varshávans and charities £1400 (Rs. 14,000); court or addiat charges £149 (Rs. 1490); political charges £720 (Rs. 27,200); post office charges £1999 (Rs. 1490); political charges £398 (Rs. 3980); total £76,663 (Rs. 7,66,630). East India Papers, IV. 321-322.

10 Collections of judicial lines and extra revenue amounted to £6413 (Rs. 64,130), making a total of £228,814 (Rs. 22,88,140). East India Papers, IV. 321-322.

within fifteen days from January 24th, and 2s. (Re. 1) to be paid in March. In the case of a black-soil village yielding £1 (Rs. 10), the proportion was 2s. (Re. 1) to be paid within fifteen days from October 26th, 3s. (Rs. 14) from November 25th, 4s. (Rs. 2) from December 25th, 4s. (Rs. 2) from January 24th, 4s. (Rs. 2) from February 25th, and 3s. (Rs. 11) from March 25th to the end of April. The landholders were made to pay their instalments in the presence of the village headman and clerk who passed receipts specifying the amount and the coin in which the instalment was paid. The amildárs or divisional officers took care that receipts were passed and themselves gave a similar receipt for the remittances made by the village officers. All payments were forwarded to the treasury in the same coin in which they were received from the landholders, except in the case of small coins, which could be changed in the sub-division with the sanction of the amildar. In 1820-21 most of the land revenue was collected through bankers or sarkars whom the landholders had to repay in kind at an enormous loss. The aboih (?) or crop share settlement was never resorted to, except when all attempt at a money settlement had failed.2 In 1820-21 the 2217 villages and 200 hamlets' of the district yielded a gross revenue of £271,096 (Rs. 27,10,960), and a net revenue of £255,627 (Rs. 25,56,270), an increase over 1819-20 of £32,639 (Rs. 3,26,390). The yearly rent settlement or jamabandi for 1820-21 yielded £27,322 (Rs. 2,73,220) more than the settlement of 1819-20. Part of this increase was due to the acquisition of fresh territory and part to a change in the mode of keeping accounts, which, by substituting the calendar for the Fasli year, threw two instalments of 1819-20 (Fasti 1229) into the following year.5 The average total collections from each sub-division during the three years ending 1820-21 were £14,433 (Rs. 1,44,330). In 1821 the Collector Mr. Thackeray expected, apparently from increase of territory, that in future they would be £15,121 (Rs. 1,51,210). In 1821 Mr. Thackeray the Collector found that to compete suggestfully with the accircle suggestfully with the suggestfully suggestfully with the suggestfully suggestf successfully with the neighbouring chiefs and with local proprietors who were in want of tenants, the specially favourable terms which had been granted in the 1819 leaves or kauls must be extended from five to nine years.7 It was also deemed advisable to encourage cultivation by granting specially favourable rising or istara leases for all villages which had fallen to one-third of their former rental.

A subject of importance in the first rettlement of the district was the local militia or shetsanadis. They had a total strength of 13,246 and yearly allowances in money and land amounting to £15,558 (Rs. 1,55,580) or seven per cent of the land revenue. In consequence of political and local changes the militia was badly distributed. Mr. Thackeray thought the best plan was to assess their lands so liberally that they would not be inclined to give them up.8

Chapter VIII Land. THE BRITISH. 1818-1821.

> Shet anadis. 1821.

Hast India Papers, IV. 787.
 Eart India Papers, III. 792.
 Hast India Papers, III. 792.
 East India Papers, IV. 392.

Last India Papers, IV. 789.
 Last India Papers, IV. 776.
 Last India Papers, IV. 777.
 Last India Papers, IV. 393.

Chapter VIII. Land.

THE BRITISH. Land Measures. 1821.

In Dharwar, as in other parts of the country, the variety of land measures in every group of villages and often in every village, caused serious inconvenience in making the revenue settlements. According to Mr. Thackeray there was perhaps no district in India where a standard land measure was more required than in Dhárwár, Some sub-divisions had no fewer than nine land measures. These again varied in almost every village; and as none of them had reference to any fixed length, there was not one of them that would answer as a standard. The Dhárwár sub-division contained 123 villages. In fifty-eight of these the pole or patti was the usual measure; but there was one pole or patti for the black soil, a second for the mixed or masab soil, and a third for the tari or rice land. Even in black soil the pole or patti varied from twenty-four to forty-eight kurgis or drill-plough's days' work.2 From its inherent uncertainty and from the roguery of village officers, the kurgi was found to vary from two to eight acres; its average size was about In villages where dry and mixed or masab lands prevailed, the rod or patti contained two to twelve variable kurgis. The rod or patti in tari or rice villages was still smaller, containing only two to eight kurgis generally of one and a half to four acres.

Kul.

Sthal.

Phalni.

Már.

In nineteen villages in the Dhárwar subdivision the lands were divided into shares each of which was termed kul. Kul meant a landholder. As a land measure it might mean the area which one landholder was expected to plough. It contained six to eight kurgis. In seven villages the sthat was the land measure. According to Mr. Thackeray the sthal answered to the Marátha thekinas apparently thikán or place, and was about the same size as the kurgi. In five villages the lands were divided into parcels called phalnis each equal to about two kurqis. In Mr. Thackeray's opinion the phalni probably originally meant the area of land that paid a tax of one fanam4 in one-tenth of a pageda. In seventeen black-soil or regad villages of Dharwar the lands were divided into mars of six to twenty kurgis each kurgi of two to eight acres. In Mr. Thackeray's opinion mor the Kanarese for a fathom was probably the origin of this measure. Twenty fathoms made a bigha, and thirty-six bighás made a már. But the fathom varied so greatly in length that the már was of very uncertain size. The raja rekha or Anegundi fathom appears to have been equal to four and a half haths or cubits. This was formerly the common Karnatak fathom; and Vithalpant, an officer of one of the Bahmani kings, immortalised his name by increasing the fathom length from four and a half to five and three-quarters haths, and twenty of the new mars made the side of a Vithalpanti bigha. The average five and three-quarters háths fathom was about ten and a half feet, and the side of a Vithalpanti bigha was two hundred feet long.

Indian Terms, 519.

4 East India Papers, IV. 389. Phalam or fanam is a small silver coin formerly current in Mødras; 122 were equal to one rapec. Wilson's Glossary of Indian Terms, 155.

¹ East India Papers, IV. 320.

The kurgi was the space which a drill-plough could sow in one day. East India

Papers, IV. 369.

**Fast India Papers, IV. 389. Theli is a land measure in use in some parts of the Deccan, of an indefinite area from one to twenty bighds. Wilson's Glossary of

thirteen sub-divisions the raja rekhi mar, and in five sub-divisions the Vithalpanti mar were the usual measures. Both varied considerably. The side of a bigha according to the raja rekhi rate would be twenty times four and a half hathe or ninety hathe; but, in order to stretch it, an addition of twelve hiths was usually made as an allowance for hinjel manjit or the leap supposed to be taken from each end of the side of a higher by the measurers. To appears the landholders half a hath more to each fathom or ten hathe to each higha, were usually added, so that the raja rekhi bigha was stretched to one hundred and twelve hathe or about 181 feet.1 In twelve villages of the Dharwar sub-division the lands were divided into plots called gules. The word meant a one yoke plough, and had the same reference to ploughing that the kurgi had to sowing. The gule was usually equal to thirty-two kurgis. In one village each division was called chakli or a piece; the chakli was about half a kurqi.2

Thus there was no local standard measure which could be made the basis of a survey. The knigi was a nominal measure and the higher though more ratisfactory in some places was so variable that Mr. Thackeray thought much discontent would be caused by adopting an average higher as the standard. In villages where an average bigha took the place of the large bigha, there would be great discontent. Mr. Thackeray thought that all the local measures should be given up and the English acre wed in their place. He had measured several villages by the acre with satisfactory results. He thought that the curvey rules introduced into the ceded districts of Madras might be applied to Dharwar. He proposed to measure one sub-division in the first year, four in the next, six in the third, and the rest in the fourth year. A number of amildors who had studied the survey rules and helped in surveying several villages were (1921) ready to take the field. With the Commissioner Mr. Chaplin's permission Mr. Thackeray proposed to begin the survey The gradual progress of the work would emble him to correct mistakes before they multiplied, to find remedies, and to make improvements, and would give him time to superintend the work, which he could not do if a more extensive survey were at once attempted. By starting with a heavily a sessed sub-division, he would be able to make reductions which would please the landholders, and make the survey popular. He estimated the expense of the curvey at about five per cent of a year's revenue. The land-holders everywhere asked for come assurance that so much tax and no more should be levied on each field. The irregularity of the land measures made it impossible to comply with this reasonable demand. At present it was necessity not hope that kept the landholder at work. The decline in the rovenue made an enhanced

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THE BRITISH. Land Measures.

Gule

Challe

Survey. 1821.

^{**} Roja 7:16; bijks originally ninety bills, honfel manye twelve, for ranges estimated ten, total 112. East India Papers, IV, 300. ** East India Papers, IV, 300 Vithalpantan officer of one of the Rohmani kings had increased the length of the red by which the ride of his bly?a was 200 feet meteod of 100 feet. ** East India Papers, IV, 300.

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assessment necessary. It was the frauds of the hereditary district and village officers which had lowered the revenue, and, unless a survey was introduced which fixed the rent of a field apart from the position of its holder, these powerful classes would turn all enhanced assessment from themselves to their weaker neighbours! Mr. Chaplin the Commissioner agreed with Mr. Thackeray that a survey was the only cure for the present evils. A survey would show Government the resources of the district and would prevent over-assessment which in their existing ignorance it was impossible to avoid. Mr. Chaplin recommended that the survey should be begun early in 1822 and that the rules which Sir T. Munro had laid down for the Madras ceded districts should be adopted as the ground work.2 In 1821-22, as noticed in a despatch dated the 27th of November 1822, a revenue survey was begun in the Karnátak. In November 1823 the Bombay Government in a despatch to the Court of Directors held that a survey was necessary because of the general destruction of all village accounts. Still the evils of a crude and hasty survey were so great that unless it was superintended by able revenue officers, the survey would cause more harm than good.3 Three evils, short crops, cholera, and a murrain prevented

1818-21.

Dharwar from making any progress in the first years of British management. In 1818-19 and 1819-20, of the population of about 550,000 the loss from cholera was estimated at 25,000 of whom about 10,000 were landholders. The number of landholders had been further reduced by the panic caused by this deadly sickness. Flight seemed the one chance of safety and numbers fled from their homes.4 In 1818-19 1819-20 and 1820-21 the crops were so scanty 5 that the smaller landholders and field labourers suffered severely,6 and their resources were further crippled by a murrain among their cattle. The Peshwa's government had favoured trade at the expense of agriculture. As most of the revenues were collected through moneylenders, their interest was much more regarded than the landholders' interests. Substantial farmers were (1821) very rare. In many villages, partly on account of the murrain. the landholders had not stock enough to keep up the usual cultivation. Advances helped the people to some extent; but Government could not afford to raise the stock to anything like its proper strength.7 The transit duty on grain pressed very heavily on the landholder. The accumulation of road dues completely barred the landholder from exporting his surplus produce to distant The landholder was obliged to sell on the spot to carriers markets.

Condition. 1821.

East India Papers, IV. 388.

East India Papers, IV. 391.

Mr. Chaplin, Comr. 5th Nov. 1821; East India Papers, IV. 323.

East India Papers, III. 810.

East India Papers, IV. 320.

^{*} East India rapers, 1v. ozo.

6 Indian millet or jeviri rupce prices were, at Hubli, in 1817, 100 pounds; in 1818, 95; in 1819, 90; in 1820, 95; in 1821, 92; for Navalgund the corresponding figures were 56 in 1818, 60 in 1819, 61 in 1820, 60 in 1821; for Hangal 150, 163, 166, 160, and 153; for Kod 240 in each of the four years from 1818 to 1821; in Dhárwár they were 50 in 1819, 49 in 1820, and 51 in 1821. These prices are from survey reports.

7 East India Papers, IV. 392.

or to grain-merchants who alone could afford to carry on the wholesale trade and to advance the road duties.1

Chapter VIII. Land. THE BRITISH.

In 1821 the principal division of Dharwar contained eighteen subdivisions and the Kolhapur division four sub-divisions. In future the principal division was to contain only sixteen, and the Kolhapur division five sub-divisions.2 Of the agriculture and other resources of the district in 1821-22 Mr. Thackeray gave the following account.3 There were three leading divisions of land, dry crop or khushki, wet or tari, and garden. Of sixteen parts 131 were dry crop, 21 wet, and 1 garden.4 There were two classes of dry crop land, the black or regad and the mixed or masab. Of black there were three varieties san-yeri or pure-black, kart-yerior stony black, and halak-yerior patchy black. Of mixed there were four varieties, hit or flour-like, kempu or reddish, kallu or stony, and kosak or sandy. Wet or tari land was of two classes kadarnaibh watered by rain and miraumbh channel or wellwatered. Most of the wet land was red. Gardons were of three classes vegetable, betel-leaf, and palm gardens. Of these the palm-gardens were the best. Since the beginning of British management no new reservoirs had been dug, but many old ones had been repaired, and many more required repair. The old Hindu rulers had left few suitable sites without a lake or a reservoir. But to the east the land was not suited for storing water and in the west the south-west rains were so abundant that water was of comparatively little value. Ponds and wells were much required in the Navalgund and some other sub-divisions where the people had to bring their water from great distances; but in these tracts the porousness of the cotton soil scarcely admitted of reservoirs. There were no rules regarding the repairs of ponds and water-courses. After the conquest many were repaired by Government, part of the cost being afterwards recovered from alienated landholders in proportion to the benefit they derived from the repairs. When any village benefited by the repairs, a general subscription or tafrik was made. Land grants or inams were in some instances given by Government to public-spirited persons who repaired ponds at their own cost. Some of the wet or malnad west lands, watered by new or repaired reservoirs, had been given on seven to twelve year leases or kauls to the builders or repairers of the reservoirs. Short rent leases for nine to twelve years were granted to the builders of wells which turned dry land into garden.

¹ Mr. Chaplin, Commissioner in the Decean, 5th November 1821; East India Papers, IV. 323-324.

² Revenue Enclosure in Mr. Chaplin's Report of 20th August 1822, East India Papers, IV. 777. The names of the eighteen and four sub-davisions are not given. In 1835-36 the eighteen Dhárwár sub-divisions were Dhárwár, Parasgad, Navalgund, Páchhápur, Dambal, Bindáqur, Hangal, Huhli, Ránchennur, Kod, Sampgaon, Bidi, Chikodi, Bigalkot, Bádámi, Hungund, Indi, and Muddebihál. Bom. Gov. Rev. Rec. 771 of 1837, 12.

⁴ Mr. Chaplin, 20th August 1822 para, 56. The details in Lurgis were, dry crop 119,795, wet 8732, guiden 996, total 129,523. Last India Papers, IV. 779-780.

^b The details of the well-digging lease or kaul were: A dry land assessment or Lindál tirra for any years if the cost was £2 10s. to £25 (Rs. 25-250), seven years if £25 to £35 (Rs. 250-350), nine years if £35 to £50 (Rs. 350-500), and

Chapter VIII. Land. THE BRITISH. 1821.

Great reservoirs could be undertaken only by the state or by individuals and village communities richer than those of Dharwar. Where there were large reservoirs, a channel-man or narkatti distributed the water and received fees in grain; in small reservoirs the landholders helped themselves according to custom under the control of the head of the village.1 The leases or kauls which had been granted to the tillers of waste land by the British were much the same as the leases granted by the Marathas. It had been found necessary to raise the term of the lease from five to nine The breaking up of waste land was costly and required Waste land was granted on leases or kauls subject to capital. increasing rent till the full assessment was paid. The term of light rents lasted four to eight years according to the length of time the land had been waste. Extra cesses were not always levied till some time after the lease had expired. To prevent the jagirdars drawing off Government landholders, more favourable terms were held out in Dhárwar, which, with Government advances or tagái, were effectual and a rapid spread of tillage was (November 1828) expected. Istávás or rising leases for deserted villages had hitherto (November 1823) been granted only to a limited extent.3

Tenurcs. 1821.

Except in parts of Kolhápur, as far as Mr. Thackeray could find. Dharwar had none of the hereditary or miras land which in the Decean carried with it the right of selling and of taking back. Mr. Thackeray thought that the absence of mirás land was due to the abundance of waste and to the very high rates of assessment which had deprived the land of any sale value. Under the Peshwa. a man who changed dry land into gardon by digging a well, would not have been turned out so long as he paid his rent, nor would the government have objected to his selling his garden, but the assessment was so high that garden lands had seldom any sale value.4 The term sheri or Government land was scarcely known in Dharwar. The corresponding Dhárwár word seemed to be kamat⁵ under which term were included lands reserved by Government officers for their own use; lands kept by proprietors and tilled by their private servants; and lands held by great men and tilled by forced labour. In dry crop lands in regular tillage the names of the three old tenures the chali or over-assessed, the katgula or short-rent, and the makta or contract were preserved. A landholder's fields were

cleven years if £50 to £75 (Rs. 500-750). If it cost between £75 and £150 (Rs. 750 and 1600), one-fourth of the land under the well was to be permanently free of rent or indm and when more than £150 (Rs. 1500) were spent, one-third of the

rent or indm and when more than £150 (Rs. 1500) were spent, one-third of the area was to be free of rent. East India Papers, III. 811; Ditto, IV. 777-778.

1 East India Papers, IV. 778.
2 East India Papers, IV. 784; Mr. Chaplin, 21th August 1822 para 97.
3 East India Papers, IV. 781, Mr. Chaplin informs us that mirdeddrs do not exist at all in the Karnátak. Mr. Elphinstone, 25th Oct. 1819, Ed. 1872, 17.

5 Kamatanu, kamat, or kamatam means the cultivation which a cultivator carries on with his own stock, but by the labour of another; the land which a camindar jāgirādar or indinādar keeps in his own hands cultivating it by labourers in distinction to that which he lets out in farm. In Upper India kamat signifies lands held by a non-resident tenant, who cultivates by a hined servant. Wilson's Glossary of Indian Terms, 251.

6 East India Papers, IV. 782.

generally nominally divided into these three classes, but all traces of

the original assessment were lost?

Slavery was uncommon though it had somewhat increased under the Peshwa. A woman guilty of theft or fornication was sometimes kept as a state slave or sold. In famines people sometimes sold their girls to be slaves. The slave could not leave the master and might be sold to another owner. Still the form of slavery was very mild. The master was bound to feed and clothe any children he had by a slave-girl, and to perform their marriage ceremonies. of a slave-girl acted as a house servant and the daughter, if not married, became a slave or a prostitute. The son was his mother's On failure of a son the master inherited the slave girl's property except what she had earned by prostitution which she was free to leave to her daughter. The master might beat a female slave or her son if they behaved badly. If he caused their death he was heavily fined. Slavery saved many lives during times of famine, and did not shake the affections of parents or encourage oppression. Bondmen were hereditary servants rather than slaves. Some slaves were imported. The position of all slaves was governed by the rame rules. A child, after being sold, and cating with or marrying with a low caste buyer, could not be redeemed.2

Between 1818 and 1821 seventy-one villages were re-peopled. In 1821 the revenue of these villages was small but it was growing. Owing to the oppression of the revenue contractors in many villages the landholders though frugal and provident were much in debt to moneylenders and merchants. Many of these dobts were of long standing and were often made of compound interest and fresh occasional nids which went on growing so as to make the accounts exceedingly complicated. A landholder once embarrassed could The landholder's fields were sometimes seldom free himself. mortgaged for these debts. In some cases the landholders and in

others the mortgagees paid the Government dues.4

All amildars or stipendiary officers were appointed by Government. Their charges yielded a yearly rental of £8000 to £15000 (Ra. 80,000-Rs. 1,50,000). The village managers or kamávisdárs had been dismissed, and their duties given to the village officers with a zillúdúr to check twenty to forty villages. The hereditary feemen or darakdars were replaced by stipendiary clerks styled chirastedars and peshkars, and shroffs. The removal of the village managers or kamavisdars had added to the duties of the village headman and clerk. The headman collected each instalment and sent it to the amildar or divisional authority and once a year attended at head-quarters to settle the rent settlement or jamabandi of his village. The village clerk or kulkarni had to send to the amildar monthly tillago returns, to attend at head-quarters and present his accounts to the Collector at the yearly rent settlement,

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> > Staff.

¹ East India Papers, III. 806; IV. 780. 2 East India Papers, IV. 806-807.
2 East India Papers, IV. 785. 4 Mr. Chaplin, 20th August 1822 para 311.
3 Under the Peshwa the division authorities were sometimes chosen by government, 3 Under the Peshwa the division authorities were sometimes bankers who had made advances.

Construct State Construction IV. 791.

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to send a note to the amildir of each individual payment, stating the coin in which the payment was made, and to give a similar receipt to the landholder. When the quildir made the I alvir or personal settlement of the village rental, the clerk had to write a paper or patta for each landholder; he was obliged to write a course or khanceumari and all extraordinary returns when called upon; he had to attend the alienation and inquiry clerks called insira and darnaft mutsaddis and furnish them with old land accounts. The village clerks were supposed to keep fourteen accounts, but their liabits were so irregular that they seldom prepared them when they were due.2 The sheleanadis or militia were employed to except remittances of treasure for which they received an allowance. The introduction of order and the restoration of the village headman's authority reduced the power of the heads or with of Vadders Koravars and other wandering and turbulent tribes.

In 1821 of twenty-two mainlatdars, one only was a native of Dhurwar. The rest of the mambatdars and all their shirastedies or head clerks were natives of the country to the south of the Tungbhadra. The majority of the peshkirs or treasury clerks were also foreigners. Of the ordinary clerks three out of four were native: of the Maratha country. The rest came from the older British provinces of Madras. The servants of the late government had provinces of Madras. been so corrupted by the renting system that it was unsafe to employ them in situations of importance or trust.2 The mainlatddes! calaries were less than two per cent on their collections. Mr. Thackeray's opinion, the existing type of revenue officer was more inclined to bully than to encourage the villagers; their object was rather to display their real by showing an increase of tilinge on paper than to add to the resources of the country. Where advances and remissions were called for, the advantages which they caused depended chiefly on the judgment of the manlatdar. When he was friendly and popular, his influence gave the poorer villages confidence and was a check on the oppression of had village head-

It was difficult to find employment for the hereditary district revenue officers the desdis or district heads, and the desliptindes or district clerks. Places were given to some dealis, but they lind no business habits and almost all were corrupt. They kept no regular accounts, and many of their imperfect records were false. In some cases their mutaliks that is agents or deputies were caught labricating

¹ East India Papers, IV, 797-798.

The fourteen village accounts were: A monthly cultivation return; a register of increase or decrease of cultivation; a general cultivation return; a statement of extra cerses; a statement of the individual distribution of the assessment; a monthly account of daily collections; a general half-yearly statement of daily collections; a monthly account of the same; a statement of arrears; a general statement of receipts; the nomula of village religious allowances; a register of the very a separate statement of the nomula of village religious allowances; a register of the village militia or statement of the nomula of village religious allowances; a register of the village militia or statement of the nomula of the village militia or statement of the nomula of the village militia or statement of the nomula of the village; and if necessary a census. East India Papers, IV. 707.

3 Last India Papers, IV. 795.

4 Last India Papers, IV. 792.

4 Last India Papers, IV. 792.

5 Mr. Chaplin, 20th August 1822 para, 371.

4 Last India Papers, IV. 1811.

⁷ Past India Papers, IV. 783,

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accounts to substantiate false claims. Their influence had consider-They had less to do with the settlement and the collection of the revenue; the landholders were more independent of them; and their agents or mutalike had in many places superseded them. Mr. Chaplin's experience was that the power of the ramindars or district hereditary officers was always exercised to the prejudice both of Government and of the landholders. All they had to do was to furnish information, and as members of juries or panchaits their rights and privileges were continued. Most of them were said to be better off than under the former government, though those who had lost employment by the change were disentisfied.2

The chief improvements in the revenue system were substituting tagái or takúvi that is advances for havála or crop-assignments; restoring the authority of village officers; stopping vexatious interference; fixing the yearly assessment and taking no more than the amount fixed; securing to every landholder the benefit of his labour; allowing each landholder to pay his rent in any coin so long as the coin was good; and granting remissions in years of failure of crops.

The tillage returns were so grossly falsified both before and for some time after the British accession that up to 1820 the area held for tillage was uncertain. During 1821-22 fre-h tillage vielded a revenue of £3431 (Rs. 34,310); on the other hand deaths and poverty and the temptation of short-rent leases led to the abandonment of land yielding £2287 (R4, 22,870). As the lease or kard lands paid only half to two-thirds of the full rate, husbandmen were always auxious to increase their area of lease land. To check this evil in 1821 rules were introduced making concessions to the landholders who continued to till their old lands. During 1819-20 and 1820-21 about 12,000 acres of land were held on istand or rising leases. In 1819-20, 3810 acres of waste land were taken on kaul or lease, and in 1820-21 26,000.4

Complainants usually attended in the afternoon. The registrar filed civil suits on three days of the week, and revenue cases were registered every other day. The registry of revenue cases helped business and supplied a valuable record which was (1821-22) regularly kept both in Maráthi and in English. Querulous persons

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¹ East India Papers, IV. 799. Muldhl is the agent or deputy of a deshpinde. Wil son's Glossary of Indian Terms, 359.

² Extract Revenue Letter from Bombay, 5th November 1823; East India Papers,

² East India Papers, IV. 763. In November 1823 the Government of Bombay (East India Papers, III. 812) thus summarised the changes which had been made in Dharwar. India Papers, 111. 512) thus summarised the changes which had been made in Dharwat. The revenue farming system was abolished; the legatimate authority of village he admen or putil's was now substituted for much arbitrary power; tents were collected more directly from the landholders; landholders enjoyed greater security of property and protection from exactions; the amount and the mode of their payments were more defined, and when necessary they were aided with advances or tagdi. The minute secretiny of the new system and the curtailment of disbursements on account of village charges was felt as a set-off against these benefits. The greater strictures in insisting on prompt payment and on the indiscriminate exaction of village balances was also unpopular. village balances was also unpopular.

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who could write and had much to say, were sometimes asked to bring their complaints in writing. This had some effect in checking falsehood and litigation, for the complainant who talked at random was often afraid of committing himself on paper.1

The lands of every village were classed and allotted so that each landholder had a share of the good the indifferent and the bad, of the highly the moderately and the lightly assessed land. Thus a landholder cultivating about forty acres (8 kurgis)2 might have half a kurgi or 21 acres of cháli or over-rented, half a kurgi or 21 acres of katguta or moderately rented, three kurgis or fifteen acres of khand makta or low-rented, and four kurgis or twenty acres of kaul or inám which was always held on specially easy terms. The lots of land and the assessment on each were distributed by the village officers with the concurrence of the village community. A landholder, who refused to till his share of chali or over-rented land, might appeal to the amildar or to a panchait or jury. At the same time he had to throw up the good and the bad land together. He was not allowed to keep the good unless he agreed to take the bad as well.3 It was chiefly on the cháli land that the extra cesses were imposed. This land was always taxed above its value. It agreed closely with the vaita of Gujarat and the apparam of the ceded districts. The division into separate classes of land had become almost nominal. All traces of the original assessment of the several parts were confounded.4

The Dharwar rate of dry land varied from 6d. to 14s. (Rs. 1-7) the bigha or about three-quarters of an acre. This included the very best rich black land, and all the varieties of mixed soil. Seven rupees the bigha was a very high rate for dry crop land, and was seldom paid unless some lightly assessed land was held with it. Well-watered garden land paid 6s. to £1 (Rs. 3-10) the bigha, and channel-watered garden land 8s. to £1 6s. (Rs. 4-13) the bigha. Rain-watered rice land paid 4s. to £1 4s. (Rs. 2-12) the bigha.5

The share of the produce which went to the landholder and to Government varied greatly in different places and under different circumstances. If the land was rich and well placed, after allowing for the cost of tillage, the holder without any distress could pay Government one-half of what was left. If the land was poor, to pay so large a share as half would not leave the landholder enough to keep himself, his family, and his cattle. Assuming that a middling landholder kept four bullocks and two ploughs, that he held thirty bighás of dry land, each bigha yielding a gross produce of 144 shers of grain, or in the aggregate 4320 shers the average price of which might be forty-eight shers the rupee which would

¹ East India Papers, IV. 779.

Rurgi, a measure of land, as much as may be ploughed and sown in one day with a pair of bullocks and a drill plough; the extent varies from about two to about eight acres; the average is said to be about five. Wilson's Glossary of Indian Terms, 303.

 ³ East India Papers, III. 806; East India Papers, IV. 782.
 ⁴ Mr. Chaplin, 20th August 1822 para. 93.
 ⁵ Mr. Chaplin, 20th August 1822 para. 103; East India Papers, III. 807; compare East India Papers, IV. 781.

give a return of £9 (Rs. 90), and that he also held one bigha of gardon land worth on an average an outturn of about £3 (Rs. 30) that is a total outturn of £12 (Rs. 120); of this whole amount the Government share would be, of the dry land crop £3 10s. (Rs. 35) or about two-fifths, and of the garden 14s. (Rs. 7) or about onefourth; that is a total Government share of £4 4s. (Rs. 42). This would leave the landholder a balance of £7 16s. (Rs. 78). From this balance the landholder had to meet the following expenses. A share of the prime cost of his four bullocks valued at £10 These bullocks were estimated to be serviceable for eight years, so that the yearly share of the cost would be £1 5s. (Rs. 121). The cost of his ploughs and the occasional hire of a help about 16s. (Rs. 8), seed for his dry and garden lands about 19s. (Rs. 91), fees to district and village officers and his share of village charities about 12s. (Rs. 6), that is a total expenditure of £3 12s. (Rs. 36). The cost of keeping the landholder's family was: Food grain, four shers daily, £2 4s. (Rs. 22); clothes £1 10s. (Rs. 15); sandries at the rate of half a rupce a month, 12s. (Rs. 6); total £4 6s. (Rs. 43). Against the total expense of £7 18s. (Rs. 79), might be set 14s. (Rs. 7) gained by the sale of butter, milk, sheep, manure, buffaloe, calves, and sometimes poultry; and by his own or his wife's labour in the field or in spinning cotton. These extra gains might lower the cost of the family keep from £7 18s. (Rs. 79) to £7 4s. (Rs. 72). This taken from £7 16s. (Rs. 78) his share of the gross produce, would leave a profit of 12s. (Rs. 6), after paying his rent and all charges. Reducing the amount of the total outturn to the scale of 100 the Government share was thirty-five and the landholder's share sixty-five per cont. Of the landholder's sixty-five per cent, fees, village officers' dues, and the cost of tillage accounted for thirty per cent; the keep of his family of six persons accounted for thirty per cent more, and left a saving of five per cent.1

After paying the current year's revenue, no law prevented a landholder throwing up his fields provided he threw up the highly and the lowly assessed lands together. Still the ties which forced every landholder to till the land allotted to him by custom and the village community were stronger than laws. The landholder must till. If he ceased to till, he subjected himself to a house-tax, became hateful to his neighbours, and was considered an alien. If a landholder threw up his lands, he generally left the village. At the same time as it was the interest of the village to keep him, the obligation became mutual and gave rise to a feeling which bound the landholder to his village and his village to him. This was the best safeguard against the decline of tillage and the best preventive to emigration. Every year a patta or agreement was given to each landholder stating what he had to pay. The village officers were also obliged to give him receipts. These precautions in time would prevent extra exactions. If exactions came to light, the village officers were obliged to repay

the landholder and were also severely fined.3

¹ Mr. Chaplin, 20th August 1822 paras, 101-105. ² Last India Papers, IV, 782. JEast India Papers, IV, 791. Land.
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Every year as he moved about the district, on materials supplied by the different village officers and checked by the mamlatdar, the Collector or the assistant collector fixed what increase or decrease each village had to pay compared with the rental of the previous year.1 The Collector generally superintended the kulvar or personal settlement of a few villages in each sub-division, that of the rest was made by the manhatdar subject to the Collector's revision. After the mauzerar jamabandi or yearly village settlement had been fixed, the mamlatdar went to each village, made minute inquiries as to each landholder's tenure, field, family, and property. When the village rental was fixed, the Collector told the leading landholders what was the rise or the fall in the village rental compared with the year before. On their return to their village the leading landholders told their neighbours and apportioned the individual rent of each landholder under the immediate superintendence of the mainlatdar who confirmed the allotment if it gave general satisfaction. The ainiti or standard rent, the minut pattis or usual cesses of the late government, and such items of the justi pattis or extra cesses as seemed fair, were ascertained; the extra cesses were embodied with the original rental and usual cesses, and the endless Maratha divisions and subdivisions were abolished. Extraordinary levies, contrary to the terms of the agreement papers or patties, were never allowed. The rent was thus clearly marked and unanthorized levies made most difficult. In many parts of the district the landholders wished to have their assessment permanently fixed except that remissions should be granted on extraordinary occasions. The town lands or kasha of Dharwar were surveyed and the lands assorted and assessed. The landholders approved of this measure which prevented changes of rental.2 Disputes in the yearly rent settlement were settled by a panchill or jury of landholders. Notice of the landholder's intention to throw up land was required, and his return to such as might have been improved by him was allowed on favourable terms. Great encouragement was held out to improvements in irrigation. The grass lands were routed but a common was kept for the village cattle. Distraint of field and craft tools was not allowed. In each village the landholders were collectively responsible for outstanding balances, but, except under special circumstances, this responsibility was not enforced. All balances that were not realized before the first instalment of the next season were remitted. Unemployed soldiers were encouraged to take to husbandry."

As bills for the amount of the assessment were no longer taken, a treasury establishment and a large body of messengers or peons had to be kept. Bonds and receipts were exchanged between Government and the landholders.

The new system of collecting the instalments of revenue from the individual holders was beneficial, but it could not work smoothly till the village officers learned their duties and the landholders were

¹ East India Papers, III. 803.
² East India Papers, IV. 789.
³ East India Papers, IV. 789.
⁴ East India Papers, IV. 791.

less dependent on moneylenders. In the years before 1821 failure of rain, cholera, murrain, and movements of troops had combined to make the revenue very difficult to collect.1 Except when payments were made in small coins, the same coin which the landholders paid to the village officers was delivered into the treasury.2 The value of each coin was established according to a fixed standard and collections were received at that standard in whatever coin they were paid. The company's rupees were scarce and at a premium, as they were the currency in which public accounts were kept.3 The shroffs or money-changers were in the habit of combining to mise or depress the value of the coins as suited their business. leading bankers in New Hubli, Bágalkot, Kolhápur, and other large market towns negotiated bills to a large amount. If in a particular town the quantity of goods or any other cause enhanced the value of the current coin, the bankers immediately sent notice to their partners or agents in other towns that a certain coin was at a premium, and their agents bought the coin required and sent it where it was in demand. Distraint of property took place only when a landholder was able but unwilling to pay his rent. Tho officers were ordered to confine distraint to these cases and not to enforce it without authority.5 The rates of interest (1821-22) usually paid by landholders to moneylenders were two to four per cent a month. Under the late government a landholder paying £10 (Rs. 100) used generally to borrow £2 10s. (Rs. 25) from an outside moneylender, to raise £5 (Rs. 50) by a village loan, and to pay £2 10s. (Rs. 25) ready money. The premium or manuti charges paid on the village loan generally amounted to one and a half per cent, and the interest on the outside loan to six per cent calculated for three months at two per cent a month.6 Under the Peshwa the landholder usually paid four, six, or eight-eixteenths in grain; if he paid in grain he lost six and a quarter to twelve and a half per cent more than if he had paid in money, as the banker received the grain at twelve and a half to eighteen and three quarters per cent below the

Under the Peshwa it was a common practice for the landholder to assign his crop to the moneylender and get the moneylender to advance the rental. This was known as the assignment or havala system.6 This system could not be at once abolished, and so long as it lasted, the loss of interest fell on the landholder. Light assessments and timely instalments went far to remove the evil. The

market price.7

refer to the as againent of a crop to a moneylender.

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¹ East India Papers, IV. 778. 2 East India Papers, IV. 792. 2 East India Papers, IV. 778.

Filest India Papers, IV. 703.

⁴ Last India Papers, IV. 792.

The preside in the original is confused. It runs thus: 'The usual rates of interest now paid by raputs to each drafer loans are from two to four per cent. A raput paying now paid by rapids to excharg for forms are from two to four percent. A rayal paying a hundred rupe of med generally, under the late government, to borrow twenty-live, to obtain fifty by means of a village loan (milidam), and to pay twenty-live ready money. The charges for manuli to general amounted to one and a half percent, and for interest existen percent, calculated for three months at two percent per mensem. East India Papers, IV, 792.

*The term hardle is also used of the practice of keeping the crops under the charge of a village officer until the instalment was paid. The passage in the text accurs to the account of a moneylender.

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landholder who still paid by assignment, lost two to four per cent by interest; but, as a little indulgence was shown regarding the coin in which payments were made, he lost little by exchange. A landholder in moderate circumstances formerly borrowed about seventy-five per cent of his instalments, and on this seventy-five per cent he had to pay seven and a half per cent interest. Under the British the share he borrowed was reduced to fifty per cent and the interest he paid to two to four per cent1.

As regards village expenses, nemnuks that is fixed sums payable to Brahmans, temples, and mosques, were sent to the treasury and then paid to the claimants. Petty village charges were paid as before by the village officers.2 Allowances to village gods of whom the chief were Durga, Hanuman, and Basvana, were continued.3 Except where they were found to have fallen below the original amount, the quit-rents paid by village and hereditary district officers were continued unchanged.4

The increase of liquor drinking was an evil. The only means of discouraging it was to make liquor as dear as possible and to punish open drunkenness severely.5

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Of the items of revenue, besides the revenue from the land and from excise, the chief was the house and trade cess known as the mohtarfa tax. This included a house and shop tax and a cess on weavers traders and professional men. The tax was very irregular in incidence and was higher than the corresponding taxes in Poona Ahmadnagar and Khandesh.6 One banker or sávkár in Bágalkot paid £15 (Rs. 150). Still, compared with the land tax, the moltarfa tax was light. Mr. Chaplin was of opinion that the best system to adopt in a trade cess was to fix a lump sum to be paid by each class of traders in each centre of trade, and leave the traders to arrange the individual payments. Mr. Thackeray was attempting to introduce this practice in the Karnátak.7 In June 1823 a number of vexations duties which yielded only a small revenue, £35 to £50 (Rs. 350 - 500), were abolished.8 The exclusive privilege of weighing and measuring had been rented in some places. This monopoly did not seem vexatious. It provided a public measurer who was responsible for frauds, and it tended to the uniformity of weights and measures at the same place.9 Under the former government many monopolies for the sale of articles had been granted. Mr. Thackeray proposed to abolish all monopolies that affected the necessaries of life. 10

In 1823 both the south-west and the north-east rains were very scanty. In November 1823 the wet or rice crops which depended

East India Papers, IV. 791-792.
 East India Papers, IV. 779.
 East India Papers, III. 793.

² Mr. Chaplin, 20th August 1822 para, 36. ⁴ East India Papers, IV. 794.

⁶ In Khandesh, though there was less traffic than in Poons and Ahmadnagar, the mohlarfa taxes were higher than in the other districts. They varied from 2s. to £7 (Rs.1-70), the mode of levying them was without system. East India Papers, III. 811.

⁸ Among the duties abolished wore cesses on grindstones, leaves used as platters, straw, chaff, cotton seed, fodder, butter, cement, dyeing barks, charcoal, carthenware, wool, shoes, cordage, and saul matti or brackish earth. Rev. Rec. 74 of 1823, 177-182.

⁹ East India Papers, III, 793.

on rain alone had almost entirely failed, and the supply of water in much of the land usually watered from ponds, was exhausted long before the grain ripened. Near Dharwar the red Indian millet suffered less, but in many sub-divisions even this hardy crop had failed. Till the 16th of November much of the land which was kept for the late harvest was unsown. Since October rice had risen thirty per cent and Indian millet twenty-five per cent.1

In 1824 the early rains again hold off. In July a large number of cattle in the district were sent for forage to the western forests. To help the cattle and men, especially in the cast, all restrictions on the use of the meadows or kurans as pasture grounds were removed. Besides from the failure of rain and want of forage the district suffered from a severe plague of cholera. In July 1824 cholera raged in many parts of the district; twenty-five deaths had occurred within three days at one village and in that village nineteen were still sick. Mr. Thackeray asked leave to entertain a native dresser with a supply of medicine in each sub-division where the epidemic provailed.2 From the close of July the season's prospects began to improve. Fine showers fell in many parts of the district; some of the rice or tari lands were sown; and though in the dry villages the early harvest had been greatly kept back, by the middle of August there was ground to hope that no serious failure would occur in the later crops. Forage was scarcer than ever. Though so many cattle had died, food was so hard to get that the price of bullocks had fallen twenty-five to fifty per cent. The price of grain was (August 1824) about thirty-five per cont higher than in the previous year, and, but for the abolition of the grain duties, it would probably have been much dearer. The deaths from cholera were much more numerous than the returns showed.3 In January 1825, in reviewing the state of Dharwar, Mr. Chaplin noticed that since 1819 the land revenue had increased by £40,000 (Rs. 4,00,000). He thought that this increase in the rental combined with seasons of bad health and short harvests, was pressing heavily especially in the east of the district. Prices also in spite of short harvests remained low and the people had suffered by the withdrawnl of the Government commercial agent who had formerly bought large quantities of cotton. The increase in the outstanding balances from £3291 (Rs. 32,910) in 1818-19to £13,435 (Rs.1,31,350) in 1823-24 showed a difficulty in realizing the Government domand. He thought that the next year's settlement should be extremely moderate. At the same time Dharwar had suffered less than the Decean districts from the failure of the early rains of 1824. A large proportion of cattle had been saved by sending them to the Dharwar forests, the late rains were specially well timed, and (January,

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¹ Mr. Thackeray, Collector, 16th Nov. 1823, Bom. Gov. Rev. Rec. 74 of 1823, 185-186.

Mr. Thackeray, 25th July 1821; Bom. Gov. Rev. Rec. 05 of 1824, 435-444.
 Mr. Thackeray, 13th August 1824, Bom. Gov. Rev. Rec. 95 of 1824, 445-456.
 Bom. Gov. Rev. Rec. 123 of 1825, 235-252.
 In 1818-19 £3291 (Rs. 32,910), In 1819-20 £2171 (Rs. 21,710), in 1820-21 £3650 (Rs. 36,500), in 1821-22 £3570 (Rs. 55,700), in 1822-23 £6010 (Rs. 80,100), and in 1823-24 £13,435 (Rs. 1,31,350). Bom. Gov. Rev. Rec. 123 of 1825, 236.

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1825) the late crops of wheat, cotton, jvári, linseed, and other produce were most promising.

In 1826-27 Dharwar consisted of nineteen sub-divisions with an average yearly rental for collection of £6506 (Rs. 65,060). details were, in the principal division, Dharwar with a rental for collection of Rs. 72,430, Mishrikot with Rs. 46,180, Parasgad with Rs. 80,940, Navalgund with Rs. 83,110, Páchhápur with Rs. 48,540, Dambal with Rs. 54,980, Bankapur with Rs. 63,630, Hangal with Rs. 57,960, New Hubli with Rs. 63,630, Ranebennur with Rs. 75,400, Gutal with Rs. 76,330, Kod with Rs. 64,040, Kittur with Rs. 74,210, Sampgaon with Rs. 86,930, and Bidi with Rs. 64,900; and in the subordinate division Bagalkot with Rs. 69,940, Bádámi with Rs. 44,350, Hungund with Rs. 70,520, and Ron with Rs. 38,070; total Rs. 12,36,090.1 The rains of 1826 were variable. Some parts of the district suffered from want of rain while in others the crops were ruined by excessive and untimely There was no cattle-disease and slight cholera in Dhárwár, Navalgund, Páchhápur, Dambal, New Hubli, Kod, Kittur, Sampgaon, and Bidi. In several parts of the district the crops suffered greatly from the ravages of rats; in some places the fields had to be sown two or three times over. The rupce price of Indian millet or jvari varied from about 116 pounds (29 shers) to about 96 pounds (24 shers) and the revenue was about £4820 (Rs. 48,200) less than the revenue of the preceding year; £21,649 (Rs 2,16,490) were remitted and £2390 (Rs. 23,900) were left outstanding.

Land System, 1828.

In 1828 Mr. J. Nisbet, the Principal Collector, gave the following account of the Dharwar system of land management.2 To lessen expenses the number of sub-divisions had been lately reduced from twenty-one to nineteen. Each sub-division was under an amildar or mámlatdár, who, under orders from the Collector or the assistant collector, and in some cases on his own responsibility, had the control of all revenue and magisterial affairs within his sub-division. The mamlatdar's first duty was to make himself acquainted with the circumstances, habits, and character of the people under his charge. With this object, at the beginning of the cultivating season, that is during May and early June, he was expected to visit every village, prepare an account of the area of land tilled by each landholder. and, by settling disputes and granting advances, enquire into and try to remove causes of decrease. He should pay a second visit to villages where disputes remained unsettled or where fresh troubles had sprung up. About October when the crops began to ripen he should make a second circuit, and learn from his own knowledge the result of the season and the effect of his former arrangements. In each village his clerks, chiefly the treasury clerk or peshkár and the village group clerks or zilládárs, should prepare a detailed statement of the fields tilled by each landholder to be compared with the agreements which the villagers had passed at the beginning of the tillage season. This comparison was the basis of

¹ Bom. Gov. Rev. Rec. 167 of 1827, 411.

²Mr. Nisbet, Principal Collector, 1st December 1828.

the yearly rent settlements and formed the ground work of the mámlatdár's future proceedings. If the accounts were carefully prepared, and the enquiries honestly conducted, the mámlatdár would find little difficulty in settling all questions which might afterwards arise regarding the collection of the revenue. Besides this main part of his work the mámlatdár had many calls on his attention from proprietors or inimdárs, claimants or hakdárs, and other classes of the people under his charge.

Under the mainlatdar was his chief clerk or shirastedar. chief clerk's duty was to keep the accounts of the mamlatdar's office comprising the details already noticed, the demands collections and balances, the issue of pay, the repairs to public works, and all other receipts and charges. In these duties the chief clerk was helped by a staff of four or five writers or karkuns. The third revenue officer in a sub-division was the peshkar or treasury clork who acted as the mamlatdar's confidential assistant. These, together with the shroff or coin-testing clerk and other inferior servants, formed the sub-divisional head-quarters staff. Every sub-division, besides the head-quarters clerks, had five or six zilládárs or villago group clerks. When well chosen, these village group clerks were the most useful class of revenue servants. As they had only a moderate charge and were almost constantly on the move from one village to another, they were acquainted with every material circumstance connected with the welfare of their charges. The last in the list of the revenue administration were the village officers, the pátils or village headmen, and the village clerks. In the revenue management of a district nothing was more necessary than to prevent the offices of village headman and clerk falling into the hands of improper persons; every family of village officers had always some member of good name and popular with the people. In accounts the most minute exactness was required. No account was recognised as valid until it had been examined in the Collector's office or kacheri, nor was any final order passed upon it until it had been read to the Collector. All collections were made in cash and paid in the first instance to the mamlatdars by whom they were remitted monthly to the Collector's treasury.

In making the yearly rent settlement or jamábandí, after the cultivation accounts were prepared, the settlement was first made by villages or maujevár and afterwards by individuals or kulvár. The maujevár or villago settlement was made by the Collector or by the assistant collector when on their yearly tour between October and February. This general settlement was made only with the heads of villages, and such leading landholders as chose to attend. It was usual to settle two or more sub-divisions at one place with reference to the distance which the village representatives had to travel. This saved time and the presence of representatives of different neighbouring villages was often of great value in settling disputes. The first process of the village settlement was to compare the actual state of the tillage of each village with the engagements entered into with the mambatdár in the early part of the season, and with the settlement of the previous year. If these

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ongagements were entirely fulfilled and there were no claims to remissions, the aggregate stood for the village rental and no further inquiry was necessary. If, on the other hand, land had been left waste, and it was shown that the landholders were prevented fulfilling their engagements by failure of rain, loss of cattle, or other sufficient reason, a deduction was made. Further remissions were allowed on account of all claims which, without further inquiry, could be certified to be just. To the rental which remained after these deductions, was added any increase which might have arisen from landholders' tilling in excess of their engagements. The total then formed the amount due to Government. As a rigid exaction of this demand would often ruin persons who had suffered from the season, or from private losses, a third series of deductions was admitted. These special deductions could not be made until after minute local enquiry, the claimants being present to answer for themselves. The settlement was therefore postponed until the kulvár or personal settlement was made. To prevent any reduction of the manjevár or village settlement, the Collector merely listened to these objections, and entered them in the accounts as tahkub or suspended. The village officers, the headman and the clerk, were given to understand that the lump village rental could not be changed except under very particular circumstances and by the Collector's direct order, and they received a patta or agreement paper from the Collector to this effect. When all the village settlements of a sub-division were finished, an abstract for each village was furnished to the mamlatdar with instructions to investigate and report on each case included in the tahkub or suspense list. The mamlatdar was told to bring to account such items as had no claim for remission, and to await orders regarding the rest. At the close of the year, the whole was shown in a comparative statement of the village and personal settlements. As except in extraordinary cases no decrease was allowed, the result of this comparison was always in favour of the maujevár or village settlement. In a subdivision whose survey was completed, there remained little more to be done at the personal or kulvar settlement than to compare the statements of the village headmen and accountants with the actual condition of the landholders, to take account of the details of each individual's holding, to make known the result to him, and lastly to take his muchalka or agreement to pay the rent as the counterpart of the patta or agreement paper which he received bearing the Collector's seal and signature. Where the survey had not been made, the kulvár or personal settlement involved considerably more labour. The rates paid by cultivators holding the same sort of land, even in the same village, frequently varied greatly, owing sometimes to deceit on the part of the village officers and sometimes to negligence or dishonesty in the person who had made the former year's personal settlement. Where these inequalities were numerous, the simplest mode of adjusting them was to require the whole body of landholders, beginning with the lowest and taking the vote of every? individual, to name a panchait or council from among themselves, by whose decision they would agree to abide. To this council

all the details were handed, and they were required to make a fair distribution of the amount of the village settlement apportioning to each person what they thought from their knowledge of the real value of his land and of its crops he could afford to pay. The result of this arbitration was almost always satisfactory, provided the council were at once made to set to work, without holding communication with the other landholders. Objections were occasionally made, but the objections were easily settled by asking the grounds of the council's opinion, and sometimes by referring to a landholder occupying a neighbouring field, who had assented to the settlement and might be trusted to give an unbiassed judgment. Where, but this rarely happened, the council was found to have acted with clear injustice, the members were made to pay the amount improperly imposed. Though most of the personal settlements had of necessity to be left to the mamlatdars, the Collector took care that he and his assistants should settle a few villages in each sub-division as a pattern to the mamlatdar.

In 1832 of the eighteen¹ sub-divisions of Dharwar, five² were under the sub-collector of Hubli, six8 under the sub-collector of Bágalkot, and the rest under the Principal Collector of Dhárwár. In 1832 the latter rains almost completely failed and large remissions had to be granted especially in Dharwar, Chikodi, and part of Pachhapur. In addition to the extreme drought, parts of Chikodi and Pachhapur were visited by two remarkable flights of locusts which destroyed every green herb on which they alighted. In 1824 the district suffered a great loss by the murder of Mr. Thackeray in the rising at Kittur. Partly from the loss of his supervision the attempt to introduce a survey failed. In October 1833 Mr. Elliot the sub-collector of Hubli wrote:5 'What might have been the success of the survey assessment, had Mr. Thackeray lived to carry his own proposals into effect, it is impossible to say. As far as the survey assessment has been yet tried in Dharwar, Navalgund, Dambal, and Parasgad, it has proved utterly inefficient. The only part of the operation executed under Mr. Thackeray's eye was part of the measurement of the land, and this, though often incorrect, proved the most useful, indeed the only useful result, by affording a standard for the comparison of the various native land measures. The classification of fields and the rates of assessment applied to each class were altogether defective. The classification of fields was a frequent subject of complaint from its general incorrectness; the rates of assessment were framed entirely by native agents on wrong principles. The accounts of collections Chapter VIII. Land.

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⁴ Bom. Gov. Rev. Rec. 549 of 1834, 7-11. ⁵ Bom. Gov. Rov. Rec. 549 of 1834, 88-90.

¹ Dhárwár, Parasgad, Navalgund, Páchhápur, Dambal, Bankápur, Hángal, Hubli, Ránebennur, Kod, Sampgaon, Bidi, Chikodi, Bágalkot, Bádámi, Hungund, Indi, and Muddebihál. Bom. Gov. Rev. Rec. 549 of 1834, 28; Rec. 771 of 1837, 58.
² Hubli, Bankápur, Hángal, Ránebennur, and Kod. Bom. Gov. Rev. Rec. 771 of 1837, 143, 152.
³ Bágalkot, Bádámi, Hungund, Indi, Muddebihál, and Parasgad. Bom. Gov. Rev. Rec. 771 of 1837, 213, 222. This sub-collectorate was abolished between 1833 and 1836. It is doubtful whether Parasgad was or was not a part of this sub-collectorate.
⁴ Bom. Gov. Rev. Rec. 549 of 1834. 7-11.

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assessment. Considerable areas of land had been thrown out of tillage in consequence of the landholders being obliged to sell their cattle to pay the revenue of former years. In Bagalkot Mr. Dunlon did not meet with many complaints of over-assessment. Still the revenues had been gradually declining since the beginning of British rule. This fall was attributed to various causes, cholera, deficient crops, and increase of weeds. Cholers, Mr. Dunlop thought, was certainly one cause. The deficient crops and the increase of weeds were, he feared, symptoms of bad cultivation arising from the people's poverty. The lands of Bagalkot had been measured but no assessment had been fixed and the variations in the revenue and in the tillage area did not correspond.2 This showed that the rates of assessment varied, a serious evil that required a remedy. In Bádámi a survey assessment called taram³ or assortment had been introduced. The acre rates varied in dry land from 3d. to 4s. $4\frac{1}{4}d$. (Rs. $\frac{1}{4}$ - $2\frac{3}{16}$), in garden land from 8s. to £1 (Rs. 4-10), and in wet land from 8s. to 16s. (Rs. 4-8). Before the survey settlement, the custom of the over-assessed or chall land and the under-assessed or katguta land prevailed in Bádámi as in other places. and the unit of measurement was the mar of about twenty-seven acres (36 bighás), and the patta of four mars. According to the people the survey had little effect on the cultivation, and Mr. Dunlop found this opinion confirmed by the notes of his settlements of fifteen villages in Bádámi. Mr. Dunlop added that in Bádámi the general good circumstances of the people, and the uniform scale of the revenues, varying little from year to year, formed a most gratifying contrast with the sub-divisions of Bidi, Sampgaon, Páchhápur, and Bágalkot, which he had visited before Bádámi. In Bádámi, 1835 had been a favourable season; it was the only sub-division where remissions on account of short crops were not required. In the greater part of Dambal a survey assessment had been fixed but it had not been attended with such favourable results as in Bádámi. In the settled villages, there had been much fluctuation, and not a few had fallen off considerably. Still the revenues of the Dambal sub-division had on the whole increased. All the villages on the Moghal frontier had formerly suffered so much by disturbances as to be either wholly or partially deserted, and their lands waste. These had been reoccupied chiefly through the judicious measures and encouragement offered by Mr. Thackeray; and cultivation and prosperity were extensive.5 The new inhabitants, who had generally come from the Nizam's country, enjoyed their lands on very favourable terms and were the best off of any class of British subjects in Dhárwár. They showed a willingness to contribute to improvements, and other signs of flourishing condition.

Mr. Dunlop, Principal Collector, 5th September 1836; Rev. Rec. 771 of 1837, 3, 7.

2 Bom. Gov. Rev. Rec. 771 of 1837, 8, 9.

2 Taram, sort, kind, class; it is especially applied in the south of India to mark the different classes of village lands, and the heads under which they are arranged in the dinerent counts. Taramdar means an assessor or a surveyor and classer of land. Wilson's Glossary, 511.

Bom. Gov. Rev. Rec. 771 of 1837, 9. 5 Bom. Gov. Rev. Rec. 771 of 1837, 11, 12,

land remained waste, there was still (1836) a field for further improvement. In Dambal (1836) Mr. Dunlop noticed that certain villages under Kalkeri, which had been leased to a certain Rangráv were populous and thriving. He hoped that more men of capital

might come forward and embark in similar undertakings.1

The sub-collectorate of Hubli including the sub-divisions of Ránebennur, Kod, Hángal, Bankápur, and Mishrikot, were (1836) very different from the rest of Dhárwár. The country suddenly changed from the monotonous, almost sterile bare black plains; the village sites and the lands near the villages were filled with cocoapalms, jack, and the broadleaved vegetables of the Konkan. It was a land of ponds; Ránebennur, Kod, Hángal, and Bankápur were full of them. In 1835 upwards of £1900 (Rs. 19,000) had been sanctioned for repairing these reservoirs, and the engineer had made considerable progress. Like the eastern districts Hubli was suffering from over-assessment. The season of 1832-33 had been extremely unfavourable, the dearth had almost amounted to famine, and grain had risen enormously high. The next two years, 1833-34 and 1834-35, were uncommonly favourable, and, combined with the increased cultivation caused by the stimulus of high prices, soon reduced the price of grain, which drove some land out of cultivation. Besides the fall in prices the rates in force in 1835-36 had been introduced by taking the highest from a statement of ten years' contributions. These rates had begun to tell; many complained that they were too high, and land was given up. In 1835-36 a reduction of £312 (Rs. 3120) was made; and it was calculated that a further reduction of at least £500 (Rs. 5000) was required to reduce the rates to a proper standard. The survey or taram assessment of Dhárwár, Parasgad, and Navalgund, had been settled by Mr. Thackeray. In Dharwar the malnad or wet west lands continued (1836) to pay according to his rates. In the east of Dhárwár, and in Parasgad and Navalgund, Mr. Thackeray's rates had proved too high, and some general measure of abatement seemed necessary, as the prosperity of the people and the public revenue had materially suffered.3

Bádámi was the only part of the district where the survey assessment or taram had succeeded. Its effects in Parasgad and Navalgund had been very injurious. Its great success in Bádámi had been owing in some degree to the soil, but mainly to the lightness of the assessment. Mr. Dunlop held that the inspection of the survey officers had been much too hurried to give them any sufficient knowledge of the actual productiveness of the land. They had accordingly in most cases to fall back on former payments. explained howMr. Thackeray's survey had caused misery inNavalgund and prosperity in Bádámi. Bádámi had suffered from disturbances and had yielded but a small revenue, therefore the new rates were low; Navalgund had enjoyed peace and had formerly been prosperous and yielded a large revenue, therefore the new rates were so high

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Bom. Gov. Rev. Rec. 771 of 1837, 11 - 12.
 Bom. Gov. Rev. Rec. 771 of 1837, 12-14.
 Mr. Danlop, 5th Sept. 1836, Bom. Gov. Rev. Rec. 771 of 1837, 15.

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that the people were ruined. Results showed defects in the survey. These defects probably could not have been foreseen. Now that time had brought them to light, an attempt ought to be made to remove them.1

Compared with 1834-35, the land revenue of 1835-36 showed a fall of £8341 (Rs. 83,410) on account of lands left waste, and £30,330 (Rs. 3,03,300) on account of remissions. Mr. Danlop (September 1836) remarked that the item which showed most strongly that the distress of the people had arisen from overassessment, was the large area of land which had passed out of tillage As landholders had no other way of earning their living, the giving up of land showed that the land was so highly assessed that its cultivation did not pay.2

1836-37.

The season of 1836 was in every respect most unfavourable and the fall in revenue was great.3 The calls for remissions due to the actual character of the season and to the condition of the landholders, were loud and urgent.4 On the 25th of September 1837 Mr. Blane, the assistant collector in charge of Ranebennur and Kod, wrote: 'These sub-divisions have unfortunately been visited by several successive indifferent and bad seasons. The consequences are deplorable. A number of gardens containing trees, the growth of years, have been laid waste and thrown up. Land that has usually grown augarcano rice and other rich crops has been sown with jvári and rági and other poor grains. this has been added the serious loss of cattle from the failure of forage and the absence of the people from their villages, tending their herds in the forests.' The result was not only temporary loss but a despondency which almost paralysed the landholders and caused the worst effects. The landholders reduced the area under tillage and rather than run the risk of the failure of more valuable crops, they contented themselves with sowing the poorer grain, feeling more secure of some return. In 1836-37 unusually large remissions were granted in Ranebennur and Kod. The assessment was excessively unequal both on account of the ever varying ancient rates and because these rates were little attended to. It was most difficult to estimate the circumstances of a landholder and to decide to what extent his rent should be reduced. At present (September 1837), rather than allow a landholder to throw up a field, it was given him at a trifling rent or upon any terms he chose to ask.5 The mismanagement of leases or kauls had been a fertile source of abuse and loss to Government. The rules laid down had not been attended to, leases had been given too freely and improperly, and no strict account of them was kept. According to the rules full assessment ought to be stipulated for in every instance. Instead of

Mr. Dunlop, Principal Collector, 5th Sept. 1836, Rev. Rec. 771 of 1837, 16-20.

² Mr. Dunlop, Principal Collector, 5th Sept. 1836, Rev. Rec. 771 of 1837, 14-25.
3 In this year the district consisted of eight sub-divisions, Dhárwár, Navalgund, Dambal, Hubli, Bankapur, Hángal, Ránebennur, and Kod. Bom. Gov. Rov. Rec. 366 of 1838, 151, 153, 173, 194. 4 Bom. Gov. Rev. Rec. 806 of 1838, 150. Mr. Blane, assistant collector in charge of Ranebennur and Kod, 25th Sept. 1837, Bom. Gov. Rev. Rec. 866 of 1838, 174-177.

this, leases had been granted at reduced rates and frequently for extended periods. Land that had been waste only for one or two years was given on terms which applied to land which had been waste for five or six years. Many of these leases seemed to have been granted by the village authorities without the sanction of the mamlatdar or the assistant collector.¹ The failure of water and over-assessment were yearly reducing the area under garden tillage.2 On the 29th of September 1837 Mr. Ravenscroft the first assistant collector in charge of Hubli, Bankapur, and Hangal wrote that the land revenue had declined by £8680 (Rs. 86,800). Most of this was remitted in consequence of the almost unparalleled failure of all kinds of crops. The rice crop had been an almost complete failure. It had grown about a foot high and then withered, even the best watered fields had not yielded more than an eighth of a crop. In the dry grain or belval country, the jvári and the late crops had been killed by the drought. In Hubli there had been no rain. In the middle of October 1836 all the crops were perishing. In 107 Bankapur villages the rice crops gave no return.3

In 1837, an abundant fall of rain and an unusually productive season extended tillage in Hubli, Bankapur, and Hangal. Compared with 1836-37 the revenue showed an increase of £12,978 (Rs. 1,29,780). Notwithstanding this large increase, it was found necessary to grant remissions of £9406 (Rs. 94,060) on account of waste land and unproductiveness. Two points essential to the maintenance of the land system were a yearly local scrutiny and that Government should bear the loss caused by unfavourable seasons and the poverty of the husbandmen. Taking the value of the soil as the proper standard for a land tax, the existing rates were much too high. They could not but operate as a check to improvement, and to the more general growth of valuable products. In December 1838 the Collector Mr. Mills wrote: 'To keep up the highest possible rate of taxation on land used for the growth of sugarcane is at variance with the principles of British management, and must prove extremely hurtful to Government and to the landholder. A fixed assessment without reference to the produce is the only method calculated to establish confidence in the mind of the landholder and thereby best promote the interests of Government. Landholders can never prosper if they have both to pay high rates and to face years of scanty crops. The paralyzing effect which such a combination causes soon shows itself and Government have at last to retrace its steps with loss of revenue and a pecuniary concession to the poverty which its own management has produced, and which a more liberal policy would have prevented.'5

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1837-35.

¹ Hom. Gov. Rev. Rec. 866 of 1838, 179-180.
2 Hom. Gov. Rev. Rec. 866 of 1838, 185.
3 Mr. Ravenscroft, 29th Sept. 1837; Bom. Gov. Rev. Rec. 866 of 1838, 154-155.
4 Hom. Gov. Rev. Rec. 972 of 1839, 3. The Dhárwar district at this time consisted of eight sub-divisions, Dhárwar, Navalgund, Dambal, Bankápur, Hángal, Hubli, Ránebennur, and Kod. Bom. Gov. Rev. Rec. 972 of 1839, 40.
3 Mr. Mills, Collector, 11th Dec. 1838, Bom. Gov. Rev. Rec. 972 of 1839, 7-8.

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In Ranebennur, Kod, and Dambal, taken together, notwithstand. ing the large remissions £9375 (Rs. 93,750) granted, the revenue was considered to have reached a fair average, and the increase £8739 (Rs. 87,390) was as much as could have been anticipated. under the circumstances of the season. The increase of revenue £2000 (Rs. 20,000) in these three sub-divisions within the past five years (1833 - 1838) was satisfactory. When the three sub-divisions were taken separately the result showed that the Dambal subdivision was alone progressing. The progress in Dambal was due to its very moderate assessment and the encouragement thereby held out to extend cultivation. In 1838-34 the revenue of Dambal amounted to £8749 (Rs. 87,490), and it had been gradually rising till it reached £11,907 (Rs. 1,19,070) in 1837-38. The season of 1837 was considered only an average one, and the increase of £3148 (Rs. 31,480) during the five years ending 1837-38 was deemed much in favour of the lenient course which had been pursued in Dambal and showed that in reality a light assessment was no ultimate sacrifice of revenue. The result of the five years ending 1837-38 in Ránebennur showed some little change, but on the whole the revenue seemed to maintain its ground. The revenue of 1837-38 had reached that of 1833-34, £12,416 (Rs. 1,24,160); it was short of 1834-35 by £1000 (Rs. 10,000). The next two years 1835-36 and 1836-37 showed considerable decrease of revenue chiefly caused by unfavourable seasons. The assessment of Ranebennur was not deemed high. The Kod sub-division showed nearly the same results as Ránebennur except that the 1837-38 revenue was short of 1833-34 by £868 (Rs. 8680) and below that of 1834-35 by £1314 (Rs. 13,140). The two following years 1835-37 showed a great falling off from unfavourable seasons. The land-tax in the Kod sub-division was not deemed high and it was (1838) thought that under favourable circumstances the revenue would increase. I

The garden assessment in Kod, Ranebonnur, and Dambal was high and required to be reduced. In the remaining two sub-divisions Dharwar and Navalgund, which were settled on the same principles as the preceding three, the revenue during the five years ending 1837-38, showed an increase in Dhárwár from £12,482 (Rs. 1,24,820) in 1833-34 to £15,822 (Rs. 1,58,220) in 1837-38, and in Navalgund from £12,113 (Rs. 1,21,130) in 1833-34 to £15,227 (Rs. 1,52,270) in 1837-38. In the Collector's opinion the gradual increase in Dharwar and Navalgund during these five years proved that the landed interests were not declining.

Mr. Mills thought that in its present condition the personal d rayatvár settlement was not likely to promote the interests either o Government or of the landholders. In Mr. Mills' opinion unless a cultivator held under a fixed tenure, he had no stimulus to exertion. The complications in the existing system were a great

¹ Bom. Gov. Rev. Rec. 972 of 1839, 9-12,

The details are: Dhárwár, 1833-34, Rs. 1,24,822; 1834-35, Rs. 1,59,333; 1835-36, Rs. 1,41,183; 1836-37, Rs. 1,32,740; and 1837-38, Rs. 1,58,222. Navalgund, 1833-34, Rs. 1,21,130; 1834-35, Rs. 1,43,051, 1835-36, Rs. 86,072; 1836-37, Rs. 1,51,495; and 1837-38, Rs. 1,62,270. Bom. Gov. Rev. Rec. 972 of 1839, 15-17.

evil, as they fostered dishonesty and extortion in the native agency. To get rid of this rapacious agency Mr. Mills suggested that simple acre rates should be introduced. He thought that more care should be taken to preserve to the holder the advantage of any improvements he might make in his land. He thought that the heads of villages had been overlooked in Dharwar, and that much improvement might have been secured by giving them villages in leaso.1 Of the whole land revenue of about £100,000 (Rs. 10,00,000) the early or rain crops yielded about £60,000 (Rs. 6,00,000), and the late or cold weather harvest about £40,000 (Rs. 4,00,000). Garden lands yielded about £5000 (Rs. 50,000). Mr. Mills thought that the garden rates were much too high. The garden land acre rates varied from 8s. to £6 8s. (Rs. 4 - 64); the acre of early crop or kharif land paid 3d. to 6s. (Rs. 1-3); the acre of late or rabi crop land paid 1s. to 10s. (Rs. 1 - 5); and the acre of wet or rice land, 2s. to £1 12s. (Rs. 1-16).2 In October 1838 Mr. Blane the assistant in charge of Ranchennur expressed the opinion that the mamlatdars, to get for themselves a name for zeal, had unduly pressed the extension of tillage. Many men had been persuaded or bullied into taking land who would have been much better employed as labourers.3 He thought the present system most unsatisfactory. An enquiry into details showed that neither the mumbatdur nor the peshkar his assistant exercised an officient check on their subordinates. The village group clerks had a wide and safe field for fraud and partiality.4

In 1838 another failure of rain caused great loss over most of the district. Navalgund perhaps suffered most. Its black soil depended chiefly on the late rains which had entirely failed. Dambal and part of Bankapur suffered in the same way as Navalgund.5 Hubli suffered severely. It had passed through a succession of had seasons and cultivation had greatly declined. The details of the revenue, are:

Dharwar Land Revenue, 1837-1839.

	1 1		1837-39.		1838-39.			
See Division.	Villages	Remis- sions,	Outstand- ings.	Collec- tions.	Remls sions	Outstand ings.	Collec tions.	
Bankspur Hángal Hubli Rángbennur	113 135 195 211	Rs. 10,508 18,550 7305 16,219 20,641 21,011 20,815 27,023	R4. 16,051 23,454 25,147 32,200 10,236 30,005 2036 8179	Rs. 1,42,171 1,28,816 03,020 1,11,027 90,000 1,32,834 1,21,202 07,700	Rs 41,127 66,524 22,185 37,980 35,591 43,491 37,459 20,203	Re. 6103 19,341 1'64 600 4032 11,643 1431 4331	Rs 1,12,623 79,944 1,05,522 1,11,40 93,949 1,36,840 1,13,123 1,06,303	
Total .	1312	1,71,170	1,66,577	9,18,422	3,10,565	49,840	8,65,00	

 Bonn.Gov.Rev.Rec. 972 of 1839, 19-21.
 Bonn.Gov.Rev. Rec. 972 of 1839, 24-2
 Mr. Blane, assistant collector, 30th Oct. 1838, Rev. Rec. 972 of 1839, 100-102. ² Bom.Gov.Rev. Rec. 972 of 1839, 24-25.

7 Bom. Gov. Rev. Rec. 1097 of 1840, 40, 41.

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THE BRITISH. 1837-38.

1838-39.

Mr. Blane, assistant collector, in charge of Rauebennur, Kod, and Dambal, 30th
 October 1833, Rev. Rec. 972 of 1839, 104-105.
 Bom.Gov.Rov.Rec. 1097 of 1840, 4-5.
 Bom.Gov.Rev.Rec. 1097 of 1840, 4-5.

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This fresh failure of rains showed the advantage of garden lands and that they were at present assessed at unduly high rates. Dambal was a most thriving sub-division. Navalguad scemel stationary and the assessment was higher than in other sub-divisions. The soil was rich but the sub-divisions suffered greatly from the went of water.1 The Hangal sub-division was not declining. At the same time its garden lands were much too highly assessed. On the superior land which paid £1 4s. (Rs. 12) and as high as £1 12s, (Rs. 16) and in a few instances £2 (Rs. 20) the acre, Mr. Mills the Collector proposed acro rates of £1 (Rs. 10) and £1 4s. (Rs. 12) to be levied permanently when irrigated from a pond or river, and, when this was not the case, from 10s. to £1 (Rs. 8-10). The village accounts were kept better and with greater correctness than in any of the sub-divisions of the Dharwar district. In the Dharwar sub-division scarcely any of the superior products were raised. Considering its local advantages Mr. Mills the Collector thought it ought to have shown more signs of improvement.3

1839-47,

In 1839-40 the fall of rain was unusually abundant and such of the dry crops as required little or no water and had been sown on wet and garden lands were almost entirely destroyed. The system of making each village responsible for the amount of its pasturage or vancharái, instead of farming it sub-division by sub-division, came into general use. The Marathi language was being gradually superseded by Kánarese in official proceedings. The total collections for the year were £115,329 (Rs. 11,53,200), remissions £8650 (Rs. 86,500), and outstandings £1292 (Rs. 12,920). The revenue details for 1838-39 and 1839-40 are⁴:

Dharwar Land Revenue, 1838-1810.

	v11-		1835-39.			1839-40.	
SUB-DIVISION	lages.	Remis- sions	Outsland- ings.	Collec- tions.	Remis- glons.	Outstand- lug-s	Collec- tions.
Dhárwár Naralgund Dambal Bankápur Húngul Rubli Ránebennur Kod	113 175 195 241 170	Rs. 41,127 60,524 22,185 37,959 33,664 43,491 37,459 26,203	10,511 1564 600 4092 11,549 1131 4881	11,12,623 70,044 1,05,823 1,11,463 98,040 1,76,840 1,15,123 1,06,002	Na. 5711 22,801 535 7301 15,937 11,275 8021 7559	R*. 1201 (920 1000 110 570 2201 631 198	Rx 170,194 175,119 192,055 142,605 112,565 173,918 141,028 125,758
Total	1312	3,10,865	49,810	8,65,067	86,603	12,016	11,53,291

The increase thus amounted to £28,822 (Rs. 2,88,220). In this increase were included £3749 (Rs. 37,490), the revenue of the thirteen villages of the newly attached Nipáni territory of Annigeri. In explanation of the large remissions, the Collector observed that the difficulty of reaching the coast shut out the local markets from foreign trade. In ordinary years the land did not yield more than enough for home use and in abundant sensons the local markets were glutted and the agricultural interests suffered severely. Again

Bom. Gov. Rev. Rec. 1097 of 1840, 9-14.
 Bom. Gov. Rev. Rec. 1097 of 1840, 22-23.

⁴ Bom. Gov. Rev. Rec. 1238 of 1811, 151, 157-158, 170, 172-175.

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THE BRITISH.

1840-41.

the landholders often held more land than they could manage and in this way subjected themselves to pecuniary difficulties.1

The season of 1840 was considerably above the average, and all the sub-divisions except Navalgund had a nearly adequate supply of rain. In two or three villages in Yavgal, the petty division of Navalgand, little or no rain fell. The assessment on the whole district averaged 2s. 6d. (Rs. 11) the acre. The average on Government land was 2s. 81d. (Re. 1 as. 51) the acre and 2s. (Re. 1) the acre on quit-rent lands. The collections during the year were £114,707 (Rs. 11,47,070), the remissions £7743 (Rs. 77,430), and the outstandings £1875 (Rs. 18,750). The revenue details for the years 1839-40 and 1840-41 are:

Dharwar Land Revenue, 1839-1841.

	Vil-		1979-10.			1810-11,			
SLE-DIVISION.	lages.		Outstand- ings.	Collec- tions.	Remis- slons,	Outstand- ings.	Collec- tions		
Dhirwir Navalgund Dumbal Bankapur Hanerl Habli Hanchemnur Kod Total	190 71 113 135 195 241 179 230	Re. 5211 22,664 5385 7397 15,897 11,275 80 21 71 62 60,502	Rs. 1204 6039 1000 110 500 2264 551 193	Re. 1,59,194 1,75,112 1,92,985 1,42,503 1,73,213 1,41,929 1,25,768	18s 4901 24,500 4509 11,612 6903 9800 7013 4704	R4 1523 5954 2598 1671 1755 3572 821 950	R4 1,C2,208 1,72,932 1,20,769 1,35,316 1,18,412 1,09,131 1,11,878 1,20,420		

In 1841-42 many irregularities in accounts were brought to light. No proper receipts had been given to landholders, leases had been granted without sanction, remissions had not reached those for whom they were intended and vast discrepancies occurred in the account of balances of former years according to the sub-divisional and district accounts. Many changes had to be made in the native establishment. Some of the mamlatdars were discharged and others pensioned, and some of the lower officers shared the same fate. The season on the whole was favourable except that at the close of the year the jrari and wheat crops were injured by heavy rain. The landholders also suffered in consequence of the low price of and the small demand for cotton. The sub-divisions of Navalgund and Dambal suffered severely from over-assessment and mismanagement. Sugar was manufactured for the first time by a private person in Hangal. The town duties in Dharwar, Navalgund, Betgeri, Hubli, Dhandsi, and Ranchennur caused much hardship. Since the duties in the smaller towns had been abolished, the buyers and sellers of foreign grains and produce, who had frequented the markets of the larger towns, flocked to the markets which were free The total collections were £116,655 (Rs. 11,66,550), the remissions £8245 (Rs. 82,450), and the outstandings £2424 (Rs. 24,210). The revenue details for 1840-41 and 1811-42 are:

1841-42.

Tho Collector Mr. Mills, 141 of 23rd Nov. 1810, Rev. Rec. 1238 of 1841, 131-148.
 Bom. Gov. Rev. 1342 of 1842, 3-10, 22-25.
 Bom. Gov. Rev. Rec. 1451 of 1813, 230-212, 275, 277, 278, 300, 451.

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Didrecar Land Resense, 1849-1842.

			1510-11			1011-12	
Sep Diemox.	Vil- lages	Remis-	Outstand luga.	Collec- tions-	Retnis- sions,	Out-tand It gr.	Collec-
Dhárs ir Naisleand Dunbal Banképur Hingal Hubli Raichemur Kod	190 81 113 135 145 150 150 150 150 150	14711 21,000 4779 14,712 0201 0701 14714 4714	184 1541 2544 2544 1011 1645 2372 821 849	lts, 1,67,114 1,72,073 1,27,763 1,27,716 1,15,012 1,41,574 1,27,129 11,11,063	Re. 12.620 10,230 4-17 13,400 84-0 15,252 64-6 6100	108. 427 15,711 1052 470 13-2 2-1 4-3	11,66,254

1812-43.

In 1842-43 the system of granting rising leases or istara lauls. which had been found to be attended with many evils, was abolished The prospect of a survey settlement had a great effect on cultivation. The estate-holders or zamindars were tilling their lands to the greatest possible extent, not knowing what might take place, and were inducing Government cultivators to take their lands by offering more favourable terms. The landholders had an idea that the new assessment would be calculated on the gross amount of the village rental and that consequently the similar the amount paid by the village, the lower would be the new rates of assessment. The early jouri crops suffered from excessive rain chiefly in the mambatdar's division of Bankapar. The collections during the year amounted to £115,082 (Rs. 11,50,820), the remissions to £7199 (Rs. 71,990), and the outstandings to £2012 (Rs. 20,120). The revenue details' of 1841-42 and 1842-43 are:

Didrect Land Revenue, 1841-1843.

	,,,,		1541-43			1842-43	
Sep Division.	VII. lages	Remis- Outstand-		Collec- tions.	Rerds. rious,	Ontelard Inge.	Coll c-
Dharnae Navalzund Navalzund Rankāpur Hāngal Hutbii Kad Total	104 51 113 164 195 241 161 231	Ra. 12,62) 17,600 4417 17,600 5160 19,2-3 40-6 1800	Br. 452 15,711 43.47 10.59 470 13-2 2-5 493	114, 127, 154 1,17, 154 1,17, 154 1,25, 162 1,25, 163 1,17, 120 1,16, 110 1,41,427 1,20,003	Re. 12,761 6-77 1973 12,045 5226 21,707 4035 9109	Re. 756 11,225 4617 836 1026 1150 601 431	1,50,521

SURVEY. 1613-1860.

The first thirty years' revenue survey settlement was introduced into forty-seven villages of Hubli between 1843 and 1845, and by 1850-51 the whole district was surveyed and settled.2 After their acquisition in 1858, the thirty-one Nargund villages were surveyed and sottled in 1859-60. Compared with the collections in the year before the survey, the collections in the seltlement year showed, for the whole district, a fall of about thirty per cent. The following statement gives the chief available details of the revenue survey settlements introduced into Dhárwar between 1843 and 1860:

Boin, Gov. Rev. Rec. 1566 of 1844, 225, 230, 231, 246-219, 308.
 Boin, Gov. Sci. CXLVIII, CLV. CLV. CLVI. CLIX. CLX, CLXI. and CLXII. Survey Commissioner's Files of Hubli, Navalgund, and Nargund Survey Settlements.

Dhárttár Survey Settlements, 1843 - 1860.

		ĺ	VIL-	SPITLE-	HIGHEST DET-		COLLECTIO	\5.	
Gnot	:r.	_	LAGES.	YPAR.	RATES. Before Survey.		After Sarvey.	increase percent.	
		1			Rs.	Rs.	Rs.		
Hubli	***	***	47 77	1843-45	2, 13, 11	49,610	47,929	Į.	3.4
Navalgund	•••	•••	77	1811-45	1,8, 11, 1	1,63,072	1,10,689		32 1
Dambal			86	1815 46	12. 1	1,23,044	70,860	Į .	428
Bankápur	•••	•••	137	1846 47	12, 14, 12, 14	1,25,761	85,001		21 3
Ránebi nnui Hángal		•••	130 161	1847-48	16.14	1,02,280	65,393	1	458
Taras	***	•	54	1847-49	13 选择 1	1,22,080	93,674		23.8
Kod	• •	••	215	1849-40	il il il il il il il	1.08,930	96,019	1.	118
Dhirnar	•••	**	132	1818-40	[52], g. 18, T]	1,52,392	20,266		40-7
MichriLot			จ๋า	1818-19	17, 17, 2, 2	47,767	25,219		47.1
Mulgund	***		29	1850 51	146, 14, 17	47,610	37.624	ı "	211
Nargund	••	•	31	1859-00	176, 176, 176	35,770	a37,638	6.8	
	Total		1233			10,82,131	7,61,410		29 3

a Survey rental on area under tillage.

The survey settlement was introduced into forty-seven Hubli villages between 1843 and 1845.1 With the exception of three phutgaons or detached villages and four of the Sar Deshgat mahal, the forty-seven Hubli villages formed part of the petty divisions of New and Old Hubli. They lay along the border of a hilly tract stretching west to the Sahyadris, which in Hubli sank somewhat suddenly into a broad level plain. The hilly portion of Hubli was formed of low flat-topped ranges of an iron clay stone, which, from the friableness of the rock, were rarely steep or rugged. Most of the hills were covered with herbage and brushwood. They were separated by flatbottomed valleys to which and the lower slopes tillage was confined. Many small ponds which had been formed by throwing dams across the narrower valleys, served to water patches of rice ground and to supply the wants of the village cattle. Except near Hubli where were numerous gardens and large mango groves, wells were few and water was scanty. Though tame, the country was green and pleasing. Close to the hills was a coarse grained red soil, and, at greater distances, every variety of finer grained red, dark-red, and richer soil, until they merged in the black cotton soil of the great eastern plain. The Hubli river drained the west, and, on its way to the sea, hurled its waters over the great Gersappa Falls. Hubli villages lay well within the hills; others were partly in the hills and partly in the plain; the rest were altogether in the plain. The climate and soil were remarkably well suited to one another. In the hilly parts where the red soil required constant watering, rain fell in frequent showers from June till October. Over the plains whose moisture-holding black soils were content with one or two wettings, the clouds floated east high above the plain and rarely yielded a shower. The chief products of the red hill lands were bajri, the early or rain variety of Indian juári, and a poor kind of rice. The black soil, in addition to the early or kharif crop of early jvari, was well suited to cotton, gram, wheat, linseed, white jvári, and all

the ordinary products of the late or rabi harvest. The red land

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1843 - 1860.

Hubli, 1843-45.

¹ Captain Wingate, Survey Superintendent, 445 of 25th October 1844; Government Letter, 1024 of 27th February 1815.

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yielded grass and weeds in alundance and needed to be well manured. The black land, when once brought into proper tillage, was remark. ably free from grass or weeds. In the town of Hubli all the local produce found a market. Hubli, with a population of 33,000 in 5458 houses, had long been an important trade centre. It had a number of old established banking and trading firms, who issued bills for large amounts on Bombay, Madrus, and other trade centres. Its export trade chiefly consisted of local cotton cloth, raw cotton mostly sent to Dombay by Kumta, and tobacco, beteluute, and chillies. There was also a considerable trade in grain, oil, butter, and other local produce. The imports were large quantities of salt, motals, British cloth and hardware, and cocoanuts, from the coast, Under British management, the personal or rayatvar distribution of the rent-settlement or jamabandi had been made by the Collector. his assistant, and the mawlatdar, instead of, as it had been under the Peshwa, being left to be adjusted by the village officers and the leading or chill landholders. With this exception, the British management did not materially differ from that of the Peshwa. The extra cesses or justi puttis had been excluded from the assessment. The result was that, with no botter guides than the mutilated and fictitious accounts of the Peshwas, the local decisions with regard to assessment were little better than guess work.1 To compensate for the injustice of the distribution when it was found to bear too hard on individuals, yearly remissions were granted. Much of these remissions were appropriated by the native officers and never reached those for whom they were intended. The average rate paid by an acro of dry-crop land in three villages was 1s. 112d. (157 as.). In seventeen villages the average number of acres in cultivation and the amount of assessment from 1820-21 to 1843-11 were 4818 acres and £717 (Rs.7170); those from 1834-35 to 1843-44 were 4626 acres and £669 (Rs.6690); and those from 1839-40 to 1844-45 were 4431 acres and £675 (Rs.6750).2

Of the entries in the rent-settlement or jamdhandi accounts, those specifying the sum total of revinue could alone be depended on. The cultivation returns were entirely untrustworthy. The incorrectness and want of system in the accounts may be judged from the fact that in 1811-42 the discrepancies between the head-quarters or huzur and the sub-divisional books on account of outstanding balances amounted to £25,000 (Rs. 2,50,000). Survey Superintendent, 415 of 25th October 1814 paras 73,65.

The details are: In the seventeen villages which the settlement grouped into the first class, the assessment row from about Rs. 11,000 in 1820-21 to about Rs. 12,500 in 1829-23 and from that steadily fell to Rs. 7400 in 1825-26. After a rise to about Rs. 11,500 in 1826-27 it again fell to about Rs. 9600 in 1825-29. It rove to about Rs. 10,300 in 1829-30 and fell to about Rs. 6500 in 1831-32. After a rise to about Rs. 13,100 in 1834-35 isteadily fell to about Rs. 6400 in 1833-37. It rove to Rs. 12,000 in 1837-39 and fell to about Rs. 10,000 in 1838-39. From about Rs. 12,100 in 1839-40 it steadily fell to Rs. 8500 in 1842-43. In the ten villages which the settlement grouped into the second class, the assessment rose from about Rs. 15,400 in 1820-21. After a slight rise in the next year it again fell to about Rs. 16,400 in 1823-24. After a slight rise in the next year it again fell to about Rs. 10,200 in 1825-20, and about Rs. 15,700 in 1820-27 it steadily fell to about Rs. 12,000 in 1825-20, and from about Rs. 13,000 in 1820-30 to Rs. 11,000 in 1831-32. It rose to about Rs. 16,700 in 1830-40 it steadily fell to about Rs. 13,300 in 1839-40 it steadily fell to about Rs. 12,900 in 1833-40 it steadily fell to about Rs. 12,000 in 1833-40 it steadily fell to about Rs. 12,000 in 1832-40. October 1811.

The survey ascertained the area of each field and made its limits permanent by constructing proper land marks. The fields were mapped and the quality of the soil and the advantages and disadvantages of the situation were ascertained. All fields were referred to one of nine classes of soils. The value of the highest class was fixed at 16, to correspond with the number of annas in a rupee. The remaining classes diminished in value from 16 to 11, the amount fixed for the poorest soil considered arable. Of the forty-seven villages, thirty, which were close to the head-quarters of the district, were first surveyed, on account of the variety of soil surface and climate in them, which rendered them well suited for general experiment, as well as for training the measuring and classing native establishments. These thirty villages were arranged into three classes. The first class included seventeen villages which either lay among the hills and enjoyed an ample supply of rain, or were close to the town of Hubli and had the advantage of its market. The second class included ten villages skirting the hills, but with the larger portion of their area in the plain and at some distance from Hubli. The third class included three villages in the plain, far from the hills and with an uncertain and scanty rainfall. In the first class the survey dry-crop acre rates varied from 4s. to 41d. (Rs. 2-as. 3). In the second class they varied from 3s. to 41d. (Rs. 11 -as. 3). The highest dry-crop acre rate adopted in the third class was 2s. 6d. (Rs. 11). Garden land inclusive of alienated land amounted to seventy-seven acres. Soil of sufficient extent for rotation was assessed at 10s. (Rs. 5), 7s. (Rs. 31), and 4s. 6d. (Rs. 21) the acre, according as the soil was good, medium, or poor, Soil, not of sufficient extent for rotation, was assessed at 8s. 6d. (Rs. 41), 6s. (Rs. 3), and 4s. (Rs. 2) the acre, according as it was good, medium, or poor. Rice lands amounted to 403 acres. Where it was watered from a pond, the soil was rated at 6s. (Rs. 3), 5s. (Rs. 21), and 4s. (Rs. 2) the acre, according as the soil was good, medium, or poor. Where it was watered from hill drainage, the soil was assessed at 5s. (Rs. 21), 4s. (Rs. 2), and 3s. (Rs. 11) the acre, according as it was good, medium, or poor. For the three classes of villages the result of the new rates on the whole arable land was an increase of £64 (Rs. 640), compared with the average collections in the twenty years ending 1844-45, and an increase of £395 (Rs. 3950) or thirteen per cent on the 1842-48 collections. The details are:

Mubli Survey Settlement, 1843-1845.

}	C2 158,		}		-7	Говч	FR.	Survet.			
•			VIL- Lages.	1835-1845.	1812-43.	Area	Rental.	Highest Dry-crop Acre Rate.			
III II			17 10 3	Rs. 10,307 13,6°9 16,236	Ra. 8535 12,783 9640	Acres. 6630 13,064 11,417	Rs. 8778 14,757 11,374	Rs. 2 11 11			
	Total		30	31,273	30,059	31,162	34,909				

Compared with the provious year, the average acre rate in the settlement year shows a fall from 2s. 9d. (Rs. $1\frac{1}{2}$) to 2s. 1d. (Rs. $1\frac{1}{2}$). In the three years ending 1814-45, the tillage area in these thirty

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Hubli, 1843 - 1846.

villages was 22,338 acres assessed at £3075 (Rs. 30,750) or an average acre rate of 2s. 9d. (Rs. 13) in 1842-43 the year before the settlement; 22,850 acres assessed at £2389 (Rs. 23,890) or an average acre rate of 2s. 1d. (Rs. 134) in 1843-44 the settlement year; and 24,237 acres assessed at £2732 (Rs. 27,320) or an average acre rate of 2s. 3d. (Rs. 13) in 1844-45. The remaining seventeen villages were in the mámlatdár's share of the Hubli sub-division. Some of them were close to the town of Hubli and others were among the hills. They were considered to possess equal advantages with the first class of villages and were assessed at the same rates, 4s. to 41d. (Rs. 2-as. 3).

Navalgand, 1844-45.

The survey settlement was introduced into seventy-eight Navalgund villages in 1844-45.1 The Navalgund sub-division was close to the Hubli sub-division. It stood on a broad level plain of deep alluvial soil, stretching west to the Sahyadris, broken by one steep quartz rock overlooking the town of Navalgund. The slope of the country was north-east to the small river Benni, which joined the Malprabha in the north of the district beyond Yavgal. The water of the Benni and in the few local wells was brackish and good water was so scarce that the people suffered severely during droughts. Tillage was almost confined to dry-crops. There was no watered land, except a few gardens; only a few scattered half-grown babbul trees saved the country from being absolutely bare. The rain was uncertain and fell at long intervals. Morab and Rotigvad received more and Yavgal received less of the south-west rains than the rest of the sub-division. The soil was suited to cotton, gram, wheat, linseed, and white jvári. The only thriving town was Navalgund but its trade was little beyond what was required for supplying the surrounding population with their necessaries. The cotton yarn span by the women of the Navalgund villages found a ready market in Hubli. Navalgund contained seventy-eight villages, thirty-five of which were under the mamlatdar of Navalgund, thirty under the mahálkari of Yávgal, and thirteen under the mahálkari of Annigeri. During the twenty-one years ending 1843-44, the tillage area in the eleven Rotigvád villages varied from about 19,200 acres in 1837-38 to about 12,000 acres in 1832-33. During the fourteen years ending 1831-32 the rental varied from about £1810 (Rs. 18,100) in 1822-28 to about £1280 (Rs. 12,800) in 1829-80 and averaged about £1490 (Rs. 14,900), and during the ten years ending 1848-44 it varied from about £2320 (Rs. 23,200) in 1839-40 to about £1080 (Rs. 10,800) in 1835-86 and averaged about £1960 (Rs. 19,600).2 In the ten

¹ Survey Supt. '445 of 25th Oct. 1844; Gov. Letter 1024 of 27th Feby. 1845.

² The details are: The Tillage Arra in 1823-24 was about 18,600 acres; between 1824-25 and 1831-32 it varied from about 16,800 to about 16,000 acres irom about 12,000 acres in 1832-33 it steadily rose to about 19,200 in 1837-38; and between 1838-39 and 1843-44 it varied from about 18,800 acres to about 14,900. From about Ra. 14,200 in 1818-19, the Rental steadily rose to about Ra. 18,100 in 1822-23; between 1823-24 and 1831-32 it varied from about Ra. 10,100 to about Ra. 12,700; in 1832-33 it fell to about Ra. 3200; it rose to about Ra. 20,100 in 1834-35; and from bout Ra. 10,800 in 1835-36 to about Ra. 22,200 in 1839-40. From this it aimost steadily fell to Ra. 17,600 in 1843-44. Diagram in Survey Rep. 445 of 25th October 1844

Morab villages, during the twenty-one years ending 1813-44, the tillage area varied from about 28,900 acres in 1827-28 to about 15,200 acres in 1843-44. During the fourteen years ending 1831-32. the rental varied from about £3560 (Rs. 35,600) in 1822.23 to about £1550 (Rs. 15,500) in 1830-31 and averaged about £2880 (Rs. 28,800); and during the ten years ending 1843-44 it varied from about £2900 (Rs. 29,000) in 1837-38 to about £1400 (Rs. 14,000) in 1838-39 and averaged £2380 (Rs. 23,800).1 During the twentyone years ending 1843-44 the tillage area in the twenty-five Navalgund villages varied from about 35,700 acres in 1837-38 to about 24,700 acres in 1813-41. During the fourteen years ending 1831-32 the rental varied from about £3250 (Rs. 32,500) in 1821-22 to about £2030 (Rs. 20,900) in 1818-19 and averaged about £2820 (Rs. 28,200); and during the ten years ending 1843-44 it varied from £4164 (Rs. 41,640) in 1836-37 to about £1890 (Rs. 18,900) in 1835-36 and averaged about £3220 (Rs. 32,200).2 During the twenty years ending 1843-44, the tillage area in sixteen Yargal villages varied from about 21,100 acres in 1837-38 to about 17,100 acres in 1843-44. During the fourteen years ending 1831-32 the rental varied from about £1120 (Rs. 11,200) in 1831-32 to about £810 (Rs. 8100) in 1818-19 and averaged nearly £1000 (Rs. 10,000); and during the ten years ending 1543-44 it varied from nearly £2800 (Rs. 28,000) in 1838-39 to about £1140 (Rs. 11,400) in 1835-36 and averaged £1910 (Rs. 19,100).* In Konnur the average acre rate between 1839-40 and 1843-44 was 1s. 51d. (113 as.); in Chilakvad it was about 2s. 111d. (Re. 1 as. 74); in Tirlápur, Halkusgal, and Alagvad it was 3s. 7id. (Re. 1 as. 131), 2s. 4d. (Re. 1 as. 23), and 2s. 2id. (Re. 1 as. 131)

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The details are: From about 27,600 acres in 1823 24 the TILLUE ARLA steadily rose to about 35,500 acres in 1826 27; it again slowly fell to about 25,700 acres in 1832-33; from this it stendily rose to about 35,700 acres in 1837-38; from about 32,100 acres in 1839-39 it rose to about 31,000 acres in 1839-40, and from this stendily

¹ The details are: From about 22,600 acres in 1823 24, the Tillage Area rapidly rose to about 29,900 acres in 1527-25; from that it stendily fell to about 17,200 acres in 1832-33; between 1833 31 and 1841-42 it varied from about 21,000 acres to about 18,200 acres; and from about 15,000 acres in 1842-43 it fell to about 15,200 acres in 1813-44. The Rryal atedity rose from about Rs. 22,200 in 1815-1915 about Rs. 35,600 in 1822-23; from about Rs. 29,100 in 1823-24 it again steadily rose to about fis 34,100 in 1825-27; from this it rapidly fell to about Rs. 15,500 in 1830-31; after a rise to about Rs. 25,200 in 1831-32 it again fell to about Rs. 25,200 in 1832-33; it rose to about Rs. 25,200 Re. 25,100 in 1834-35; from about Rs 15,200 in 1835-36 it rese to Rs 29,000 in 1837-38; in 1835-39 it was about Re. 14,000; and from 1639 40 to 1843 44 it varied from about Rs. 27,600 to about Rs. 20,500. Dingram in Survey Rep 415 of 25th October 1511.

^{32,100} acres in 1839-39 it rose to about 31,000 acres in 1839-40, and from this steadily fell till in 1-13-14 it was about 24,700 acres. The Rental rose from about Rs, 20,000 in 1821-22; from 1822-23 to 1831-32 it varied from about Rs, 32,200 to about Rs, 24,100; in 1821-22; from 1822-23 to 1831-32 it varied from about Rs, 32,200 to about Rs, 24,100; in 1852-33 it was about Rs, 15,500; and between 1833-34 and 1843-34 the variations were frequent ranging from about Rs, 41,600 to about Rs, 19,000. Diagram in Survey Rep, 445 of 25th Oct. 1844.

3 The details are; I rom about 18,200 acres in 1821-25 the Trillar Anna steadily rose till it was about 22,100 acres in 1830-31; from about 22,000 acres in 1831-32 it fell to about 17,500 acres in 1832-33; and from this slowly rose to about 23,100 acres in 1832-33; and acres in 1837-34; it fell to about 22,100 acres in 1838-39 and again steadily rose to about 23,100 acres in 1851-42, and then fell to about 17,100 acres in 1813-14. From 1818-19 to 1831-32 the Rental varied from about Rs, 11,200 to about Rs, 8100; in 1832-33 it was about Rs, 3300; and from 1833-34 to 1813-14 to varied from about Rs, 25,000 to about Rs, 11,200. Diagram in Survey Rep, 445 of 25th Oct. 1844.

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respectively; in Kolivád it was 1s. $9\frac{1}{3}d$. (1- $\frac{1}{3}as$.); in Bhophápur, 1s. $1\frac{1}{3}d$. (8 $\frac{3}{3}as$.); and in Annigeri 1s. $6\frac{1}{3}d$. (12 $\frac{1}{3}as$.).

For settlement purposes seventy-seven of the Navalgund village were arranged into three classes. The first and most westerly class included most of the Morab and Rotigvad villages; the second class included the remaining villages of these groups, with the whole of Navalgund, the petty division of Annigeri, and a few Yavgal villages; the third class included the remaining villages of Yavgal, In the first class of villages the highest survey dry-crop acrerate was 2s. 74d. (Rs. 17d) and the average rate 1s. 104d. (15 as.). In the second or central class the highest dry-crop acre rate was 24 3d. (Rs. 11) and the average rate 1s. 71d. (13 as.). In the third or eastern class of villages the highest dry-crop acre rate was 2s. (Re. I) and the average rate was 1s. 54d. (114 as.). The remaining village of Halihal was assessed at a highest acre rate of 3s. (Rs. 14) and was proposed to be transferred to Hubli. The 171,353 acres of Government arable land were estimated to yield £14,382 (Rs. 1,43,820). The claims or haks of hereditary officers were consolidated in the new assessment. The result of the introduction of the survey rates in the seventy-seven villages forming the three classes was that, compared with the rental on the tillage area in 1843-44, the survey assessment on the whole arable area showed an increase of £3370 (Rs. 33,700) or thirty per cent. The details are:

Navalgund Survey Settlement, 1844-45.

Division	Vst-	Former R	TOTAL SCRV71		
1/1/14/01	140EA	1818 - 1832.	1621-1814.	1843 - 41.	Restat.
Navaigund Morab Rotigvid Yárgal Annigen Phutgaon Konnur	25 16 11 16 12 2 1	Rs. 31,057 30,616 14,801 11,857 	N*, 28,078 23,607 10,580 21,110	Rs. 51,748 21,991 17,571 17,651 20,075 1344 336	Na 40,000 2P,874 20,780 21,419 26,161 1775 611

Compared with the previous year the effect of the survey settlement was a fall in the average acre rate from 3s. 3\frac{1}{4}d. (Re. I as. 10\frac{1}{4}) in 1849-44 to 1s. 9\frac{1}{4}d. (14\frac{1}{4}as.) in 1844-45.

Dambal, 1845-46. In 1845-46 the survey settlement was introduced into the cighty-six villages of the Dambal sub-division in the cast of the district. Of the cighty-six Dambal villages into which the survey rates were introduced in 1845-46, forty-three were under the mamlatdar of Gadag and forty-three under the mahalkari of Dambal. Dambal was the most casterly and also the largest sub-division in the Dhárwár district. It was of very irregular shape, tapering southwards almost to a point, and having a long narrow outstanding spur to the north, besides a few detached villages. Dambal was bounded on

¹ Capt. Wingate, 445 of 25th October 1844 para. 125. The figures in this statement do not agree with those given on the preceding page from the survey diagram. 2 Captain Wingate, Survey onpt. 551 of 20th September 1815. Government Letter 778 of 21st February 1846. Bon. Gov. Sci. CLIV.

the north by the Ron petty division of Badami, on the east by the Nizam's country, on the south by the Tungbhadra river, and on the west for a distance of thirty miles by a range of rugged hills and then Navalgund which stretched from the north end of the hills to Ron on the north of Dambal. The total area of the eightysix villages according to the 1825 survey was 358,277 acres of which 343,189 were arable and 15,088 unarable. Of the arable acres, 224,390 were Government, 61,578 were alienated, 37,269 paid quit-rent or judi, and 19,952 were service land or shetsanadi. Except the hilly tract to the south-west and one or two villages in the extreme north, Dambal, like Navalgund, was an unbroken plain of black soil. The only large stream was the Tungbhadra. southern half of Dambal sloped towards the Tungbhadra; the rest sloped north towards the Malprabha. In the first or south half water was good and abundant; in the second or north half, especially on the side of Navalgund, water was scanty and bad. Differences of soil and climate separated Dambal into two well marked natural divisions. The climate of the level parts of Dambal which included three-fourths of the whole was like that of Navalgund and the fall of min was perhaps equally uncertain. The chief supply came late in the season from the September and October thunderstorms. In consequence of this the harvest of the plain villages was almost wholly of late crops among which the leading products were, white jvári, gram, wheat, and cotton. Safflower and linsced were also largely grown. The remaining fourth, which consisted of villages lying within and immediately around the western hills, differed from the plain both in soil and in climate. These hills, which in parts rose more than a thousand feet above the plain, gathered the south-west monsoon vapours in frequent showers during June July and August. The same wind equally charged with moisture for weeks together swept over the neighbouring plain without bringing a drop of rain. In this moist hilly tract, the soil was mostly reddish, poorer and coarser than the black loam of the plain. Captain Wingate thought (1815) this wasdue to the uneven surface of the land, washing the finer particles of soil into water-courses which boro them to lower levels. Even in the midst of the red soil of the hills when, as in a poud bed, finer particles found no way of escape, a fine black-soil deposit was almost always present. Its frequent monsoon showers and the inability of the red soil to support long continued droughts, nearly confined the husbandry to early crops. The lands of some villages were of both kinds, those nearest the hills being red, cultivated with early or monsoon crops, and those further in the plain black growing late or rabi crops. Tillage in Dambal was almost confined to the ordinary dry-crop husbandry. Watered lands occurred in a limited number of villages; but they were of inconsiderable extent and importance. They were partly watered from wells and partly from streams lying mostly along the Papaushani Halla which crossed the south of Dambal.

The chief markets were Gadag, Betgeri, and Mundargi. Besides there towns were four large villages, Nargal, Sudi, Saudi, and

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Hombal, in the mamlatdar's charge; and three, Dambal, Lakundi and Harlapur in the mahalkari's charge. Gadag and Betgen which were not half a mile apart, were both flourishing town The Gadag and Betgeri markets were the great resort of the people of the villages round, who disposed of bundles of cotton yam and received cash to buy weekly supplies. The two towns contained a large population, a considerable portion of whom made their living by weaving cotton robes and bodice cloths whose strength and fastness of colour were greatly admired. Mundargi, though in 1845 it was not equal to Gadag or to Betgeri, had a growing trade and promised to become the most important town in Dambal Dambal had some trade in coarse cloth which was used locally, Iron was also smelted in Doni and Chikvadvatti and prized by the people for field tools. It sold at fifteen pounds (25 shers) the rupco. Field produce was largely exported, but most of the trade was in the hands of strangers. The chief article was cotton which was bought by agents of commercial houses at Hubli, Belgaam, and Kumta for the Bombay market. A few Gadag and Betgeri traders and even some of the wealthier landholders of particular villages sent cotton to Kumta on their own account. In Belvanki, Saudi, and Sudi two or three landholders always sent their own cotton to Kumta and generally bought as much as they could from their neighbours and carried it with their own. Instances of this kind occurred in other villages also but the whole quantity of cotton exported by the local growers and traders was trifling compared with what was taken away by strangers. Wheat was the export of next importance. It was bought in considerable quantities for the Belari markets by traders who came to Dambal for the purpose. Wheat was also occasionally sent to the Hubli, Dharwar, Nargand, and Badami markets. Cotton and wheat were both usually paid for in cash and were therefore of chief importance to the landholder by enabling him to raise money to pay his assessment. Other grains and oilseeds were exported but to no large extent. The bread corn of the subdivision and perhaps the most widely grown crop was the white jvári. It was of so little value as an export, as to be sometimes unsaleable for cash at any price. The village moneylenders took it in repayment of grain advances, and it was also a common substitute for money in the village markets where it freely exchanged for vegetables, fruit, and other trifling necessaries. Landholders could seldom, without a great sacrifice, raise money on Indian millet to pay their assessment.

Dambal suffered severely during the disorders of the Maratha rule, and several villages had not yet (September, 1845) recovered from the devastations then committed. When the sub-division came into British hands population was much reduced and a great part of the arable land was overrun with brushwood. The Madras personal or rayatvar plan of management was introduced on the British accession, and, to encourage settlers to bring the arable waste under tillage, Mr. Thackeray, when Collector, gave leases or kauls on liberal terms. The survey settlement followed in 1825 and

1826,1 but the native officers managed matters so that the settlement caused little change in the amount of assessment previously levied. The lease system continued, and the abatement it produced in the standard assessment, together with other yearly remissions, prevented the collections ever rising much above half of the full survey or taram assessment. The survey diagram for sixty-four villages² shows that up to the 1832-33 (Fasli 1242) scarcity, the cultivation and assessment gave no sign of improvement. Captain Wingate thought this stationary condition was partly due to the impoverished state of Dambal when it came under British management and partly to a systematic under-rating of the tillage area by the village officers. Without attaching much importance to these conjectures he felt convinced that the very moderate assessment collected during the early years of British management had been one main cause of Dambal's subsequent prosperity by allowing the growth of the resources which enabled it to bear, without injury, the gradually rising rental of later years. Since 1832-33 tillage and land revenue in Dambal showed a steady increase, the best proof of moderate assessment. The fall of tillage and assessment in the two years (1843-1845) before the revenue survey, was not due to any fall in the resources of the sub-division but to the removal of restrictions on throwing land out of tillage, and discountenancing the existing evil and universal system of forcing tillage beyond the wants of the people. In the sixty-four villages for which details were available the net assessment or revenue for collection during the twenty years ending 1845 averaged £6295 (Rs. 62,950) that is an average acre rate of 1s. 3&d. $(10\frac{5}{12}$ as.). These twenty years showed a decline during the first eight (1825-1833) and an improvement during the last twelve (1833-1845). The average during the ten years ending 1845 was £7787 (Rs. 77,870) or an acre rate of 1s. 41d. (10s as.). This was a period of improvement. During the five years ending 1845 the

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¹ In the thirteen Sudi and Saudi villages, the survey measurements were aloue introduced. In 1845 the standard assessment was the jasti sal beri or highest rate of any year of British management before 1833-34. Captain Wingate, 554 of 20th Sept. 1845, Bom. Gov. Sel. CLIV. 74.

2 The survey diagram was prepared for the sixty-four of the eighty-six Dambal villages, which remained after deducting the twenty-one villages of the Kalkeri farm and the village of Harlágur whose accounts were incomplete. The twenty-one villages of the Kalkeri farm and the village of the part of the part of the part of the villages of the Kalkeri farm and the village of the part of the villages of the Kalkeri farm and the village of the part of the villages of the Kalkeri farm and the village of the villages of the Kalkeri farm and the village of the villages of the Kalkeri farm and the village of the villages of the Kalkeri farm and the villages of the villages of the Kalkeri farm and the villages of the villages of the Kalkeri farm and the villages of the Kalkeri farm and the villages of the villages of the Kalkeri farm and the villages of t the willage of Harlapur whose accounts were incomplete. The twenty-one villages of the Kalkeri farm were held by Bhimrav Rangrav of Mundargi at a yearly rent of Rs. 12,000. This farm was originally granted in 1833, and the lease was renewed for a further period of twelve years in 1844. The accounts of these farmed villages were for several years wanting, and in other respects Captain Wingate was not prepared to give them full credence. The accounts of the village of Harlapur were also wanting for twelve years when it was held in saranam by the late Hari Govind Siddhe Deshmukh. These twenty-two villages were therefore excluded from the diagram. As regards the accounts of the remaining sixty-four villages, which, with two exceptions, were complete for all the years of British management, Captain Wingate (1845) thought particularly as regarded the area of land under tillage and the gross assessment thereon that their correctness should not be implicitly relied on. Still they furnished the best available information on these subjects. The amount of each year's rent or jamabandi set apart for collection might be relied on as correct. of each year's rent or jamabandi set apart for collection might be relied on as correct. Captain Wingate, Survey Superintendent, 554 of 20th September 1845; Bom. Gov. Sel. CLIV. 77.

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average was £8547 (Rs. 85470) or an acre rate of 1s. $5\frac{5}{4}$ d. ($11\frac{5}{6}$ ss.), This period was nearly stationary but prosperous.

On the whole the British management had been liberal, and the assessment was far from heavy. The population and the wealth of the villages had steadily increased. In these respects Dambal offered a pleasing contrast to the neighbouring sub-division of Navalgand, which had been seriously impoverished by the levy of a burthensome assessment. Other circumstances favoured Dambal. The Nizám's country bounded it for upwards of fifty miles and the oppression incident to the rackrenting system over the border had drawn many settlers into Dambal. It was not uncommon for the people of the Nizám's border villages to have houses and lands in British villages as well as in their own villages in order to remove their families and cattle from the Nizám's territory, when the renter's exactions passed the limits of endurance. These movements were termed parasihals or out-settlements. They were more than usually numerous in 1845.

With such neighbours and the contrast between the complete freedom of trade in British territory and the restrictions placed upon trade across the border, it was not surprising that British rule should be popular in Dambal. The people were well disposed and were generally in easy circumstances. A large proportion of landholders were independent of moneylenders and some of the more substantial could afford to keep the whole of the year's produce by them, until the arrival of a merchant at the village or some other contingency enabled them to dispose of it to advantage. These remarks were not of universal nor even of very general application. As might be expected in a sub-division where new settlers were numerous and which was yet only recovering from the injuries received before the beginning of British management, many, perhaps most, Dambal landholders were needy. Notwithstanding the favourable description of the circumstances of the people, Captain Wingate was of opinion that the survey and assessment were as necessary in Dambal as in other less prosperous sub-divisions. Much of the land under tillage was held on leases or subject to other abatements. These leases were yearly falling in. The holders were unwilling to continue the land at the full rates, though to what extent the full rates required to be modified, there were no means of ascertaining. The area of land held by each landholder was equally uncertain. It was frequently found to be very different from the area entered in the village books. All that was known was, that, taken with its existing abatements, the assessment as a whole was not heavy. There was no guide to administer its details. The yearly settlements and

I The details are: From about 75,000 acres in 1825-26 Tillage steadily rose to about 82,000 acres in 1820-30, and from that steadily fell to nearly 70,000 acres in 1832-33; after this, tillage steadily and rapidly rose to about 122,000 acres in 1837-38; and from this slowly declined to about 16,000 acres in 1844-45. For the cight years ending 1831-32 the Rektal varied from about Rs. 54,000 in 1830-31; from about Rs. 75,500 in 1832-33 it steadily rose to about Rs. 62,500 in 1834-35, and after a fall to about Rs. 52,500 in 1835-36 again rose to about Rs. 77,000 in 1837-38; from about Rs. 68,000 in 1838-39 it slowly rose to about Rs. 89,000 in 1844-45. During the nine years ending 1834-35 Remissions varied from about Rs. 53,000 in 1844-45. During the nine years ending 1834-34; for the ten years ending 1844-45 they varied from about Rs. 63,000 in 1826-30 to about Rs. 21,000 in 1833-34; for the ten years ending 1844-45 they varied from about Rs. 63,000 in 1836-34. Rom, Gov. Sci. CLIV.

the general land management had been without system. They depended on the varying opinions of the officers in charge of the sub-division,

a state of things most unfavourable to lasting prosperity.1

According to the 1825 survey the total area of the eighty-six villages was 343,189 acres of arable land and 15,088 of unarable land, while the 1845 survey showed 364,857 acres of arable and 50,228 of unarable. Of the arable area 238,179 acres were Government land and the rest was alienated. Of the eighty-six Dambal villages, sixty-four were divided into two groups, twenty-six northorn villages beyond the climate influence of the western hills and thirty-eight villages further west which enjoyed a better climate owing to the nearness of the hills or the better markets of Gadag and Betgeri. Of the remaining twenty-two villages, Halikeri and Harlapur came into the first group and twenty others into the second group. The highest dry crop survey acre rates proposed were for the first group 2s. (Re.1) and for the second group 2s. 3d. (Rs. $1\frac{1}{3}$). The effect of the proposed rates on the sixty-four villages for which past revenue figures were available was, compared with the preceding year, a reduction of between £800 and £900 (Rs. 8000 and Rs. 9000) or between seven and eight per cent. The total new rental on the entire arable area of these sixty-four villages was £11,500 (Rs. 1,15,000), which was £3000 (Rs. 30,000) or thirty-five per cent in excess of the average net rental of the five years ending 1845 and £2000 (Rs. 20,000) or twenty-one per cent above the rental of 1844, the highest ever realized under British management. Under the new settlement the highest rental of the Government lands in the twentyone farmed villages amounted to about £1400 (Rs. 14,000) while the rent paid by the farmer every year was £1200 (Rs. 12,000). Of these £100 (Rs. 4000) were obtained from judi or quit-rent on alienated lands, and consequently after the survey settlement all that could be realized beyond £800 (Rs. 8000) for the Government land would be the farmer's profit.4 The existing garden assessment varied from £1 16s. (Rs. 18) the acre downwards. This had

Chapter VIII. Land. Survey. Dambal, 1845-4G.

¹⁴ The present nominal assessment has been so influenced by the abatement by means of leases and uncertainty of the area held, as to render it of httle value as a standard of comparison. Mr. Blane, Rev. Comr. S. D. 1734 of 31st Oct. 1815; Bom. Gov. Scl. CLIV. 89. ²Capt. Wingate, 135 of 10th Sept. 1846; Bom. Gov. Sel. CLIV. 96-97.

²Capt. Wingate, 135 of 10th Sept. 1846; Bom. Gov. Sel. CLIV. 95-97.

³The rates fixed for the Navalgund villages bordering on Dambal were Re. 1 the acre for the best dry crop soil in the northern villages and Rs. 1½ in the southern villages. The plain parts of Dambal, both in respect of climate and markets, were much on an equality with north Navalgund. Bom. Gov. Sel. CLIV. 81.

⁴The farm was originally granted in 1833 at which period the net rental of the Government land was £740 (Rs. 7400). By an extension of cultivation the same rental in 1844-45 increased according to the farmer's accounts to £1130 (Rs. 11,300) or fifty-three per cent in twelve years. This was a very large increase; but in the same period the villages of the sub division under Government management showed a still more rapid rate of improvement, their cultivation having increased no less than still more rapid rate of improvement, their cultivation having increased no less than sixty-four per cent. And the farmed villages, which were close to the tax-radden Moghalái or Nizám's country and to the Belári markets, were at least as well placed as the rest of Dambal. Captain Wingate was opposed to the farming system in surveyed districts. Regarding the present case he remarked (September 1845): 'The effect of this form has been to exceed an individual with some thousands of threes a year this farm has been to enrich an individual with some thousands of rupees a year which otherwise would have passed into the Government treasury.' Bom. Gov. Sci. CLIV. 82.

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DISTRICTS.

On the whole the British management had been liberal, and the assessment was far from heavy. The population and the wealth of the villages had steadily increased. In these respects Dambal offered a pleasing contrast to the neighbouring sub-division of Navalgund, which had been seriously impoverished by the levy of a burthensome assessment. Other circumstances favoured Dambal. The Nizám's country bounded it for upwards of fifty miles and the oppressions incident to the rackrenting system over the border had drawn many settlers into Dambal. It was not uncommon for the people of the Nizám's border villages to have houses and lands in British villages as well as in their own villages in order to remove their families and cattle from the Nizám's territory, when the router's exactions passed the limits of endurance. These movements were termed parashula or out-settlements. They were more than usually numerous in 1845.

With such neighbours and the contrast between the complete freedom of trade in British territory and the restrictions placed upon trade across the border, it was not surprising that British rule should be popular in Dambal. The people were well disposed and were generally in easy circumstances. A large proportion of landholders were independent of moneylenders and some of the more substantial could afford to keep the whole of the year's produce by them, until the arrival of a merchant at the village or some other contingency enabled them to dispose of it to advantage. These remarks were not of universal nor even of very general application. As might be expected in a sub-division where new settlers were numerous and which was yet only recovering from the injuries received before the beginning of British management, many, perhaps most, Dambal landholders were needy. Notwithstanding the favourable description of the circumstances of the people, Captain Wingate was of opinion that the survey and assessment were as necessary in Dambal as in other less prosperous sub-divisions. Much of the land under tillage was held on leases or subject to other abatements. These leases were yearly falling in. The holders were unwilling to continue the land at the full rates, though to what extent the full rates required to be modified, there were no means of ascertaining. The area of land held by each landholder was equally uncortain. It was frequently found to be very different from the area entered in the village books. All that was known was, that, taken with its existing abatements, the assessment as a whole was not heavy. There was no guide to administer its details. The yearly settlements and

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SURVEY.

Dambal,

1835-45.

the general land management had been without system. They depended on the varying opinions of the officers in charge of the sub-division,

a state of things most unfavourable to lasting prosperity.1

According to the 1825 survey the total area of the eighty-six villages was 313,189 acres of arable land and 15,088 of unarable land, while the 1845 survey showed 364,857 acres of arable and 50,228 of unarable. Of the arable area 238,179 acres were Government land and the rest was alienated.² Of the eighty-six Dambal villages,

sixty-four were divided into two groups, twenty-six northern villages beyond the climate influence of the western hills and thirty-eight villages further west which enjoyed a better climate owing to the nearness of the hills or the better markets of Gadag and Betgeri. Of the remaining twenty-two villages, Halikeri and Harlúpur came into the first group and twenty others into the second group. The highest dry crop survey acre rates proposed were for the first group 2s. (Re. 1) and for the second group 2s. 3d. (Rs. 12). The effect

2s. (Re.1) and for the second group 2s. 3d. (Rs.1s). The effect of the proposed rates on the sixty-four villages for which past revenue figures were available was, compared with the preceding year, a reduction of between £800 and £900 (Rs. 8000 and Rs. 9000) or between seven and eight per cent. The total new rental on the entire arable area of these sixty-four villages was £11,500 (Rs. 1,15,000).

which was £3000 (Rs. 30,000) or thirty-five per cent in excess of the average net rental of the five years ending 1845 and £2000 (Rs. 20,000) or twenty-one per cent above the rental of 1844, the highest ever realized under British management. Under the new settlement the highest rental of the Government lands in the twenty-one farmed villages amounted to about £1400 (Rs. 14,000) while the rent paid by the farmer every year was £1200 (Rs. 12,000).

Of these £100 (Rs. 4000) were obtained from judi or quit-rent on alienated lands, and consequently after the survey settlement all that could be realized beyond £800 (Rs. 8000) for the Government land would be the farmer's profit. The existing garden assessment varied from £1 16s. (Rs. 18) the acro downwards. This had

²Capt. Wingate, 135 of 10th Sept. 1816; Dom. Gov. Sci. CLIV. 96-97.

²The rates fixed for the Navalgund villages bordering on Dambil were Re. 1 the acre for the best dry crop roll in the northern villages and Re. 1½ in the southern villages. The plain parts of Dambil, both in respect of clumpta and markets, were villages. The plain parts of Dambil, both in respect of clumpta and markets, were

of have and uncertainty of the area held, as to render it of little value as a standard of comparison. Mr. Blane, Rev. Comr. S. D. 1731 of 31st Oct. 1815; Bom. Gov. Sci. CLIV. 89.

villages. The plain parts of Dambul, both in respect of climate and markets, were much on an equality with north Navalgund. Bom. Gov. Sci. CLIV. 81.

4 The farm was originally granted in 1833 at which period the not rental of the Government land was 5710 (its. 7400). By an extension of cultivation the rame rental in 1844-45 increased according to the farmer's accounts to £1130 (its. 11,300) or fifty-three per cent in twelve years. This was a very large increase; but in the same period the villages of the sub division under Government management showed a still more rapid rate of improvement, their cultivation having increased no less than sixty-four per cent. And the farmed villages, which were close to the tax-raden Mogheldi or Nizan's country and to the Belair markets, were at least as well placed as the rest of Dambal. Captain Wingste was opposed to the farming system in surveyed districts. Regarding the present care he remarked (September 1945): 'The effect of this farm has been to enrich an individual with some thousands of rupees a year which otherwise would have passed into the Government treasury,' Bom. Gov. Sci. CLIV. 52.

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Chapter VIII. Land. SURVEY. Dambal. 1845-46.

been so high in particular instances that yearly abatements were required. In 1845 the net assessment on 221 acres of garden land was £145 (Rs. 1450) or an acre average of nearly 14s. (Rs. 7). As nearly all the garden land was under tillago, this rate seemed to be easily payable. Still Captain Wingate thought it did not leave garden tillage so marked an advantage over drycrop tillage as to encourage the sinking of wells and the spread of gardens. He proposed to adopt for Dambal the Hubli survey garden acre rates which varied from 10s. to 4s. (Rs. 5-2) and averaged 8s. 34d. (Rs. 4 as. 21). From the limited area of garden land this reduction would have little influence on the Dambal revenues, while they would encourage sinking of wells for which Dambal possessed many facilities. The existing rice land rates were equally high with the garden rates. Much larger abatements amounting to nearly one-half were required to admit of the land being cultivated. The Hubli rice land acre rates of 6s. to 3s. (Rs. 3-11) were proposed. Under these proposed rice rates it was estimated that the existing average 9s. (Rs. 41) would be reduced to 5s. (Rs. 21). The total survey rental on the whole Government arable land of the eighty-six villages amounted to £14000 (Rs. 1,40,000) against £9958 (Rs. 99,580) the net rental of the tillage area of 1844-45 or a prospective increase of £4042 (Rs. 40,420) or forty-one per cent. Though the whole of this increase might never be realized, Captain Wingate had little doubt that an addition of £2500 to £3000 (Rs. 25,000-Rs. 30,000) or thirty per cent over the highest recorded collection would be permanently secured.1 The new rental absorbed all direct levies of raw produce formerly made by hereditary officers. In 1842-43 the total value of these levies was estimated at about £160 (Rs. 1600). Government sanctioned the proposed rates, and the plan suggested by the Revenue Commissioner for transferring the management of the twenty-one farmed villages to Government officers for the introduction of the new assessment.2

Bankapur. 1846-47.

In 1846-47 the survey settlement was introduced into 137 villages of the Bankapur sub-division in the centre of the district.3 Bankapur villages, 137 were Government and eleven were alienated. Of the eleven alienated villages, seven paid a quit-rent and four were held rent-free. Besides these, upwards of twenty jágir or alienated villages were scattered over the sub-division, nearly all of which belonged to the small principality of Savanur. The survey settlement was introduced into 137 Government villages, eighty-one of which were under the mamlatdar of Shiggaon, forty-eight under the mahálkari of Karajgi, and eight under the first kárkun of Kalas. Bankápur was the most central sub-division of Dhárwár. On the north, a strip of jágir or alienated land separated it from Navalgund and Dambal, on the east it was bounded by Ránebennur, on the south

¹ Capt. Wingate, Survey Supt. 554 of 20th Sept. 1845, Bom. Gov. Sel. CLIV. 84.
² Gov. Letter 778 of 21st February 1846, Bom. Gov. Sel. CLIV. 91-94,
³ Capt. Wingate, Survey Superintendent, 146 of 29th Sept. 1845; Gov. Letter 5007 of 3rd Dec. 1847; Bom. Gov. Sel. CLV.

by Kod, and on the west by Hángal. It was of very irregular shape. The western half, forming the greater part of the Shiggaon mamlatdar's charge, was the basin between the Taras hills to the west and the Savanur high grounds to the east. This was drained by a large nála or stream which fell into the Varda near Devgiri. From Devgiri the eastern half, forming the Karajgi mahálkari's charge, occupied the valley of the Varda and the high grounds on either side of the Varda valley to the borders of the Gutal mahal or petty division of Ranebennur. The eight Kalas villages, which lapsed in 1842,1 and one or two more were scattered over the jágir or alienated territory to the north of the sub-division. Bankapur was generally flat, though it was skirted by hills or rising grounds on nearly every side. The low lands were generally of good quality, except near the hills, where was much poor soil. The scenery was tame, but from the greater number of trees was much more pleasing than the bare plains of Navalgund and Dambal. The climate of Bankapur was superior to that of Navalgund and Dambal and was much like that of the mamlatdar's division of Hubli. The greatest fall of rain was along the line of western hills where a group of seventeen villages were locally known as malnad or wet-land. The belt of plain next to the wet-land or malnad held the next most favourable position in respect of rain. East of this the rainfall became gradually lighter and less certain as there were no hills high enough to check the passing clouds of the south-west monsoon. The chief products were jvari and cotton from the black soils and jvári, náchni, sáva, and oil seed from the red soils. The ordinary husbandry was good. Manure was applied to all the land under tillage, and considerable care and skill were shown in gathering and preparing it. For black soils the general course of cropping was an alternation of Indian millet or jvári with cotton, as wheat, which was a frequent third crop in Navalgund and Dambal, seldom succeeded in Bankapur. The cotton crop was of even more importance in Bankapur than in Navalgund and Dambal. It was the chief export of the sub-division and provided the cash required to pay the assessment. Besides the ordinary dry crops there was a considerable area of rice and garden land. The rice lands amounted to about 1200 acres almost all in the wet western villages. The better soils yielded a crop after the rice was reaped, and in low and moist sites were well suited for sugarcane. According to the former survey the garden lands were somewhat in excess of 400 acres and were very valuable, yielding a Government revenue of upwards of £600 (Rs. 6000). Their chief products were sugarcane, plantains, betel-leaf, betelnuts, and cocoanuts.2 The gardens mostly lay under the large reservoirs of Shiggaon, Haveri, Hatti-Mattur, and Karajgi, from which they were watered by canals. When, as someChapter VIII. Land. SURVEY. Banlápur, 1846-47.

¹ The village of Ingalgi lapsed in 1836 and the eight villages of the Kalas group lapsed in 1842. Bom. Gov. Sel. CLV. 71.

² The gardens of Shiggaen, which were full of cocca and betelnut palms, were destroyed by Tipu's soldiery when encamped in the neighbourhood (1786) during the siege of Savanur. Bom, Gov. Sel. CLV. 83.

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times happened in the hot season, the canals failed, the gardens were watered from wells sunk in the wet soil below the reservoirs. Canals from the mighty dams or bandhárás built by the sovereigns of Anegundi, supplied irrigation to many miles of garden land. The gradual silting of reservoirs led to the abandonment of garden tillage. The prospects of the cotton trade were depressed and ma. nufactures were confined to the weaving of coarse cotton and woollen fabrics. Much of the surplus produce found its way to the important market of Dunchi in the Taras petty division of Hubli. The chief exports were to Kumta in North Kanara for shipment to Bombay, The Vanis and other merchants of the market towns of Karajgi, Haveri, and Savanur, were the chief buyers of the local jvari. Through their agents the Kumta merchants also created a great demand for cotton. A market was held once a week in Karajgi, Haveri, Riti, and Devgiri. Karajgi and Háveri carried on a wholesale trade in grain and coarse sugar or gul. The merchants of Homnabad in the Nizám's country sent agents to Hávori to buy cardamoms, clean them, and propare them for market. About 300 gonis or bullock-loads of cardamoms, estimated at £7200 (Rs. 72,000), were yearly bought by the Homnabad merchants chiefly from Sirsi, Bilgi, and Siddapur, of which the Haveri merchants bought about £500 (Rs. 5000) worth or twenty bullock-loads. The Savanur and Van-Sigli markets in the Savanur Nawab's district afforded a ready market to the Hatti-Mattur cultivators for the sale of garden produce.

Since the former survey, the accounts had been kept in acres instead of in mars. The practice of entering in the accounts the gross rental or kamál of the land under tillage began in 1834-35 and the full kamál was shown in 1841-42. The Bankapur survey diagram shows that during the nineteen years ending 1845-46, out of the total 122,000 Government arable acres in 128 villages of the sub-division, the tillage area varied from about 73,000 acres in 1834-35 to about 52,000 acres in 1845-46. During the twenty-six years ending 1845-46, the net rental varied from about £9600 (Rs. 96,000) in 1821-22 to about £5600 (Rs. 56,000) in 1832-33 and averaged £7700 (Rs. 77,000).2

The details are: The Theage Arra fell from about 63,000 acres in 1827-28 to about 61,000 acres in 1829-30; from 1830-31 there was a gradual increase till in 1834-35 it amounted to about 73,000 acres; in 1835-36 it fell to about 69,000 acres; the next two years brought a little more land under tillage but in 1838-39 the tillage area again fell to about 63,000 acres. In 1839-40 it ross to about 68,000 acres and then gradually declined till it reached 52,490 acres in 1845-46. From about Rs. 91,000 in 1820-21 the NET RENTAL rose to about Rs. 96,000 for the next two years; from about Rs. 79,000 in 1823-24 it rose to about Rs. 86,000 in 1824-25 and again foll to about Rs. 76,000 in 1825-26; from nearly Rs. 90,000 in 1826-27 it steadily fell to about Rs. 56,000 in 1832-33. It rose to about Rs. 86,000 in 1834-35 and again fell to about Rs. 51,000 in 1835-35. It rose to about Rs. 50,000 in 1837-35 and again tell to about Rs. 51,000 in 1836-37; from about Rs. 82,600 in 1837-38 it fell to about Rs. 63,000 in 1838-39 and rose to about Rs. 86,000 in 1839-40; from this it slowly fell to about Rs. 72,000 in 1845-46. From about Rs. 26,000 in 1834-35 REMISSIONS rose to about Rs. 53,000 in 1836-37; for the four years ending 1840-41 they varied from about Rs. 35,000 in 1838-39 to about Rs. 15,000 in 1839-40; for the five years ending 1845-46 they varied from about Rs. 63,000 in 1842-43 to about Rs. 63,000 in 1845-46. Diagram in Sut-

vey Rept. 146 of 29th September 1846, Bom. Gov. Sel. CLV.

The mar varied from 16 to 80 acres (4-20 lurgis). Wilson's Glossary, 331.

During the whole course of British administration Bankapur had been suffering from over-assessment. In spite of nearly thirty years of peace and security, the abolition of transit duties and taxes, and the improvement of roads, cultivation was more limited in 1845-46 than at any former period of British rule. The average dry crop acre rate for the five years ending 1833-31 was about 1s. 9d. (14 as.) and the average dry cropacre rate for the seven years ending 1845-46 was 2s. 33d. (Re. 1 as. 21). The average garden acre rate in Haveri was £2 18s. (Rs. 29). But a large proportion of irrigated land was classed as rice ground though cultivated with the usual garden products, and the average rate of assessment for this was only 14s. (Rs. 7). This reduced the general average rate for the whole land watered from the Haveri reservoir to about £1 9s. (Rs. 141). At Shiggaon the garden rate varied from £1 1s. to £4 (Rs. 104-40); the average for 1814-45 was £1 10fs. (Rs. 15fg). The general average rate for the whole garden land of the survey group was £1 8s. 71d. (Re. 14 f.). The higher of the rates could be paid only by gardens cultivated with cocoa and betel palms or with the betel creeper. This took long to come to bearing, twelve years for the cocoa-palm, eight for the betel-palm, and three for the betel-vine. The highest acre rate for well gardens was 10s. (Rs. 5). The rice land amounted to about 1200 acres chiefly in the first class villages along the western horder of the sub-division and yielded a revenue of between £400 and £500 (Rs. 4000 and 5000). The acre assessment varied from £1 (Rs. 10) to 2s. (Re. 1). The average acro rate for 1844-45 was about 8s. 6d. (Rs. 41). The landholders were not all poor. Especially in the mamlatdar's villages substantial farmers had eight to twenty bullocks and one or two large crop-carts, and paid yearly rentals of £10 to £30 (Rs. 100-300). To landholders of this class the existing rates were not oppressive, as their means enabled them to keep their lands in a high state of tillage and to raise crops far superior to those grown by the ordinary local husbandmen. At the same time the body of the landholders were poor and the farm stock was so scanty that it did not amount to more than one bullock for every thirty acres of tillage.

The proposals for a fresh assessment were to have four classes of villages assessed at highest dry crop acre rates varying from 3s. 6d. (Rs.1\frac{3}) to 2s. 6d. (Rs.1\frac{1}{4}). The first class was to comprise fifteen rice villages lying along the western border and to have a highest dry crop acre rate of 3s. 6d. (Rs. 1\frac{3}{4}); the second class was to contain fifty-five villages, lying east of the first class with a highest dry crop acre rate of 3s. (Rs. 1\frac{1}{2}); the third class of thirty-six villages still further cast was to have a highest dry crop acre rate of 2s. 9d. (Rs. 1\frac{1}{5}); and the fourth or the most easterly class of thirty-one villages was to be assessed at a highest drycrop acre rate of 2s. 6d. (Rs. 1\frac{1}{4}). The rates of inferior soils were to be proportionally lowered according to their relative values as fixed by the survey classification. The proposed highest acre rate for pond gardens was \$\mathcal{C}\$ 10s. (Rs. 1\frac{1}{2}) and for well gardens 10s. (Rs. 5). The proposed highest rate for the best rice-land admitting of an occasional sugarcane crop was 10s. (Rs. 5) falling to 2s. (Re. 1). The auction

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sale of the produce of fruit trees was to be abolished. All levies in kind by the village headmen and accountants and hereditary officers, styled áya-mira, were to be absorbed in the new assessment. The survey assessment yielded an average drycrop acre rate of 1s. 7½d. (13 as.) which was about 7½d. (5 as.) less than the average of the collections of the seven years ending 1845-46 and 1½d. (1 a) less than that of the five years ending 1833-34. The effect of the survey settlement on the revenue from gardens was to reduce it by one-third. The effect of the settlement on the entire tillage area was to reduce the average acre rate from 3s. 2d. (Re.1 as. 9½) to 2s. Re. 1). The details are:

Bankapur Survey Seitlement, 1846-47.

ĺ				Former.				
	Yra	R.	125 Villages	Grazing Fees,	Nine Villages	Total.	1810 Survey Revial	
	1616 - 1646 1820 - 1834 1831 - 1646 1646-46	***	Rs. 77,406 63,230 76,183 71,820	Re. 1936 1508 2158 4983	Rs. 10,707 10,707 10,707 10,131	Rs. 90,063 75,405 89,053 86,939	Rs. 1,15,000 1,15,000 1,15,000 1,15,000	

The proposed settlement was sanctioned by Government in December 1847.1

Ránebennur, 1847-48.

In 1847-48 the survey settlement was introduced into the 130 villages of old Ránebennur in the south-east of the district. Ránebennur was bounded on the north by Bankápur, on the east by the Tungbhadra river, and on the south and west by the subdivision of Kod. Besides the Tungbhadra river, it was watered on the north by the Varda and on the south by the Kumadvati. The sub-division included 142 villages, twelve of which were alienated. Of the whole number, sixty-nine Government and six alienated villages were under the mamlatdar of Ranebennur, and sixty-one Government and six alienated villages under the mahalkari of Gutal. The general aspect of this sub-division which was very partially cultivated was bare and storile. The mámlatdár's division was crossed in several directions by low barren ridges. The soil varied greatly in different parts. Except. some land near the river, and an open level tract between the hills of the Gutal petty division and the town of Ranebennur, the country to the cast of the road from Dhárwár to Harihar was hilly or waving ground of which a small portion only was fit for tillage. The rest, though in parts rocky, was generally covered with a thin coating of earth and afforded a scanty pasturage for cattle and sheep. The soil in the Gutal petty division was mostly red, and the waste parts of it were mostly covered with low brushwood. The climate was nearly uniform. There was not rain enough for rice, but an ample supply for the ordinary drycrops. Droughts were

¹ Gov. Letter 5007 of 3rd Dec. 1847, Bom. Gov. Sel. CLV. 155-160. ² Capt Wingate, Survey Superintendent, 15 of 26th Jan. 1818; Gov. Letter 2773 of 16th May 1848; Bom. Gov. Sel. CLVI.

The chief products belonged to the mungari or early The most important crops were jvári and cotton; and chillies were raised in a few villages bordering on Kod. The watered lands were of some extent, the most important being garden grounds under the lakes of Ranebennur, Gutal, and Honatti. These reservoirs were filled with mud and the supply of water failed in the hot season. The wells that were then used had rarely springs and were capable of supplying water only for a limited period. The garden products were cocoanuts, betelnuts, betel leaves, Two years' rotation was generally practised. and angarcane. Rich land was manured every fourth or fifth, and sloping or poor land overy second or third year. Byadgi was the most important market town. Ranebennur, Hulgeri, Bisarhalli, Airani, Kadarmandalgi, Kárdgi, Reti, and Agri were among the others. manufactures were cotton stuffs such as rumúle, dhotars, and sádis, and woollen blankets. About 400 looms were worked in Ranebennur, 250 in Byádgi, 140 in Hulgeri, 74 in Airani, and 69 in Bisarhalli. Silks were made in Ranebennur from raw silk brought from Maisur. They were chiefly for home use, but were also sent to Maisur and Kánara. The trade of the petty division centred in Ránebennur and Byadgi and was chiefly in the hands of merchants of these towns who carried on a considerable exchange trade between Belári and Maisur on the one side and Kanara on the other. The yearly value of the Ránebennur trade was estimated at £20,000 (Rs. 2,00,000) and that of Byadgi at £9000 (Rs. 90,000). The leading imports were betelnut, jágri, and sugar from Anavatti, Sorál, and Shikarpur in Maisur, and from the Kod and Hangal sub-divisions; rice from Chikkerur and Haunsbhavi in Kod, and from the Nagar sub-division of Maisur; indigo from Bolári; cocoanuts and tobacco from Davangeri, and salt from Kumta and Dhundshi. Mild intermittent fevers prevailed at the beginning of the rains and during the cold weather; guineaworm was less common than in other parts of Dharwar. The landholders were a well disposed intelligent and industrious class. They were not wanting in enterprise but their enterprise had been checked by the want of any permanent interest in the land.

The diagram for 129 Government villages shows that, during the twenty-one years ending 1846-47, of a total of about 190,000 arable acres, the tillage area varied from nearly 75,000 acres in 1835-36 and 1836-37 to about 46,000 acres in 1845-46. During the nine years ending 1828-29 the rental varied from about £9600 (Rs. 96,000) in 1821-22 to about £8300 (Rs. 83,000) in 1823-24 and averaged about £9100 (Rs. 91,000). During the ten years ending 1838-39 it varied from about £8300 (Rs. 83,000) in 1834-35 to about £900 (Rs. 39,000) in the two years ending 1832-33, and averaged about £6400 (Rs. 64,000). During the eight years ending 1846-47 it varied from nearly £9000 (Rs. 90,000) in the three years ending 1841-42 to about £6400 (Rs. 64,000) in 1845-46, and

averaged nearly £8000 (Rs. 80,000).1

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Survey. Ránchennur, 1847-48.

¹ The details are: From about 67,000 acres in 1826-27 Tillage rose to about 69,000 acres in 1827-28 and steadily fell to about 62,000 acres in 1829-30; from about 64,000 acres in 1830-31 it fell to about 58,000 acres in 1831-32; from this it rose to about

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Ránebennur,
1847-48.

The revenue history of the Ranebennur sub-division may be divided into three periods. The first embraces the nine year ending 1828-29 when tillage and collections remained nearly stationary and the average acre rate was high, 2s. 8 d. (Re. 1 as. 5;); the second period, the ten years ending 1838-39, was marked by a slight advance in tillage and great fluctuations in revenue, with an average acre rate of 1s. 101d. (15 as.). The third period, the eight years ending 1846-47, showed a steady decline in tillage and revenue. The average acre rate was 2s. 83d. (Re. 1 as. 57). The high and steady average of collections in the nine years ending 1828.29 were due partly to the establishment of peace and confidence and partly to an arrangement which acted as an indirect tax on holders of alienated lands by allowing no one to till them who did not hold some fully assessed land. The fluctuations of the revenue and the advance in tillage during the ten years ending 1838-39 were due to bad seasons, liberal remissions, and efforts to prop up an excessive assessment by grants of arable waste on favourable terms. The decline in the eight years ending 1846 was due to the giving up of the kaul or lease system and to stricter management. The slight advance in tillage and collections in 1846-47 was due to landholders taking fields in anticipation of the lower survey rates. The removal of the old Maratha restriction on any one tilling alienated land who did not hold highly assessed government land, had helped the holders of alienated lands at the expense of the Government revenue. At the same time it had been of some use in lightening the pressure of the very high rates on Government land. Except in a few villages the people, though poorer than in neighbouring sub-divisions, were not depressed.

For the survey settlement, the villages were arranged into two classes with dry-crop acre rates varying from 2s. 9d. to 3d. (Rs. $1\frac{1}{3}$ - 2 as.).

18 of 26th Jan. 1848, Bom. Gov. Sel. CLVI.

1 Among the most striking cases of over-assessment were the neighbouring villages of Mehdur and Gudgur in the Gutal petty division. Taking the average of the ten years ending 1830 the yearly revenue of Mehdur was about Rs. 1200; for the ten years ending 1840 the average was Rs. 600; and in 1845-46 the total revenue was Rs. 154. The average of Gudgur for the ten years ending 1830 was Rs. 850, and for the ten years ending 1840, Rs. 500; the total revenue for 1845-46 was Rs. 140. The lands of both villages were nearly waste in 1846-47. There were not more than four or five Government laudholders and these held their lands on favourable terms. Ruins of hones in 1846-47 showed that people had been driven away. The rates in these villages were not higher than in other villages, only the people had no other resources to help them. Bom. Gov. Sel. CLVI, 88.

^{74,000} acres in 1834-35 and continued about the same during the next three years; and then almost steadily fell to about 46,000 acres in 1845-46; in 1846-47 it rose by about 3000 acres. From about Rs. 91,000 in 1820-21 the Next Reeklad rose to about Rs. 96,000 for the next two years; from about Rs. 83,000 in 1823-24 it rose to about Rs. 93,000 in the two years ending 1827-28; from this it rapidly fell to about Rs. 39,000 in the two years ending 1823-33; after rising to about Rs. 83,000 in 1834-35 it steadily fell to Rs. 55,000 in 1836-37; from about Rs. 78,000 in 1837-38; fell to Rs. 70,000 in 1839-39; during the next three years it was nearly Rs. 90,000; and from this steadily fell to about Rs. 64,000 in 1845-46. In 1846-47 it rose by about Rs. 16,000 in 1823-24 to about Rs. 2000 in 1821-22; during the eix years ending 1834-35 they varied from about Rs. 22,000 in 1833-34 to about Rs. 20,000 in 1830-31; during the six years ending 1840-41 they varied from about Rs. 56,000 in 1830-31; during the six years ending 1840-41 they varied from about Rs. 49,000 in 1840-41; during the six years ending 1846-47. Diagram in Survey Rept. 16 of 26th Jan. 1848. Rom. Gov. Sel. CLVI.

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The first class contained forty-four villages in the south-west which was assessed at dry crop acre rates varying from 2s. 9d. to 3d. (Rs. 11 - 2 as.) The second class contained the remaining eighty-six villages and was assessed at dry crop acre rates varying from 2s. 6d. to 3d. (Re. 14 - 2 as.). The highest garden acre-rates were £1 10s. (Rs. 15) in the case of pond-gardens, and 10s. (Rs. 5) in the case of well gardens. The highest rice acre rate was 10s. (Rs. 5) all acre rates beyond 4x (Rs. 2) were confined to soils capable of yielding the superior products, sugarcane and vegetables, in addition These survey rates included the levies hitherto made by the landholders for the village officers. In the case of quit-rent land, whenever the quit-rent exceeded the survey assessment of the whole land whether paying quit-rent or rent-free, the excess was cutoff, and the survey assessment of the whole land was levied in lieu of the quit-rent. The immediate effect of the survey settlement, compared with the 1816-17 net rental, was a fall from about £7000 to £5000 (Rs. 70,000-Rs. 50,000) or twenty-nine per cent. If all the arable area was brought under tillage, the survey assessment showed an increase of fifty-nine per cent over the average collections of the twenty-seven years ending 1846-17. The details are:

Ranchennur Survey Settlement, 1847 49.

	Corr	さくすりつちも ロ		3418		
Year	Tillage are, 120 villages	Minini	CALMENDA	Village Officers' Free		Fartey Assess ment.
1521-1547 1621-1549 1621-1549 1622-1547 1645-1547	Re 77.791 (17.79) (17.79) (17.79) (17.79) (17.79) (17.79) (17.79) (17.79)	Ps. : : : : : : : : : : : : : : : : : : :	15. 25. 25. 47.6 47.6	Pa. 104) 104) 1040 1040 1040	P+ P1,5 5 P4,731 C7,6 17 F* (60)	E4 1,51,033 1,51,03 1,71,03 1,71,03 1,71,03

In 1847-48 the survey settlement was introduced into 161 Government villages of Hangal in the south-west of the district. Hangal was bounded on the north by the Taras petty division of Hubbi and by Bankapur, on the east by Bankapur and Kod, on the south by Maisur, and on the west by Kanara. Of its 193 villages, thirtytwo were alienated of which thirty paid a quit-rent. Of the whole number 103 Government and thirty-one alienated villages were under the mamlatdar of Hangal, and fifty-eight Government villages and one alienated village were under the mahalkari of Adur. Nearly the whole mainlatdar's division was broken by low almost detached hills To the west and south the hills were covered with thick forest, and to the north and east some were bushy and others were rocky. Through its greatest length Hangal was crossed by the rivers Varda and Dharma. The bed of the Varda was too deep to be used in irrigation. The Dharms was dammed in two places. upper dam was thrown across the stream at the village of Mantgi where the Dharma entered Hangal from the west. The canal from the Mantgi lake was carried through the lands of seven villages Sevalli, Herur, Govrápur, Gigihalli, Sirmápur, Doleshvar, and Surleshvar, a distance of nearly twelve miles. At Surleshvar it

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¹ Bom, Gov. Sci. CLV1, 95.

² Capt. Wingite, Survey Superintendent, 15 of 26th January 1918; Gov. Letter 2773 of 16th May 1815; Bom. Gov Sci. CLVI.

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divided into two branches. One branch passed south-cast through the lands of Giglikop, Alur, Havasgi, and the alienated village of Mulgund, and emptied itself into the Varda. The other branch passed north-east through Akivalli and Arleshvar, and, after passing two villages of the Adur petty division, again entered Hangal and emptied itself into the present (1816) bed. The second dam was near the village of Kenchi Neglur about twelve miles below Mantgi This dam turned the river water into a canal, which, after running more than five miles, emptied into the Naregal lake. Besides supplying the Naregal lake which overflowed every year and watered the rice lands of Vardi, this canal also watered the rice lands of Nellibid. From the main canal minor ones branched in every direction, fed the ponds of villages through whose lands they passed and, in times of failure or of cessation of rain, watered rice fields and gardens. The prevailing soil was a light brown whose surface was rarely broken in the hot season except in wastes which the rains had carved into fissures and hollows. In the mamlatdar's division the soil was light and the climate moist. The greatest fall of rain was along the border villages to the west, where was a large area of uncleared land. The watered crops were the only crops of importance. Most of the mabalkari's division was a level plain of black soil. The climate was much drier than in the mamlatdar's division and was well suited for dry crops. As it lay so near the Sahradris, the supply of rain in Hangal was generally certain and regular. For their full supply of water the rice lands depended on ponds. The garden products were plantains, betel and cocoa palms, and the betel-vine. In plain black soil villages the early, called mungari or kharif, harvest included yellu Sesamum, uddu Phaseolus mungo, jola Sorghum vulgare, dhod talli navani Panicum italicum, muligi save Panicum miliare, rági Eleusine corocana, togari Cajanus indicus, mataki Phaseolus aconitifolius, hesaru Phaseolus radiatus, avari Dolichos lablab, and hurli Dolichos biflorus. The hingári or late harvest included sialu jola, godi wheat, kadli gram, hatti cotton, kusumbi safflower, audla castor seed, guralu an oil plant, karra save Panicum aniliacum, navani Panicum italicum, and agashi also an oil plant. In the malnad or wet villages the early harvest included bhatta rice, rági, and muligi sáve Panicum The hingari or late harvest included audla or castor seed, hesaru Phaseolus radiatus, uddu Phaseolus mungo, agashi an oil plant, avari Dolichos lablab, and kadli gram.1

			21.1.1.2.1.1					
GRAIN,	MAIN,		128 ggerg,		Grain,	Acre O		Bag of 128 shers.
Jola Cotton-wool Cotton-seed Kusumbi Natean Såte Hesaru Rogi Audla Togari	Shers. 240 48 141 60 120 150 20 150 40 80	Shers. 120	Ils a 3 0 Uncertain. Ditto. 2 B 2 8 6 0 1 10 4 0 5 0	Kadli Vddu Hurli Averi Yelu Mataki Godi Julbhatta Sanbhatta Dodginbhatta	36 03	Shers. 40 15 20 21 40 40 20 200 200 200	Rs. a 12 0 7 0 2 8 4 0 4 0 2 8 3 12 2 8 2 0	

The chief market towns in the mamlatdar's division were Hangal, Bomanhalli, Alur, and Maharajpeth, and in the mahalkari's charge Adur and Naregal. The manufactures were confined to the weaving of a few coarse cotton and woollen stuffs for local use. The imports were, jváii, wheat, gram, kusumbi, and agashi oil from the north; cloths from Hubli and Belári; salt, dried and fresh cocoanuts, botelunts, dried and fresh dates, pepper, cardamoms, and plantains from Kumta. The exports were rice, jvari, and raw sugar to Navalgund, Dambal, Nargund, Hubli, and Badami. A little raw cotton also went from the plain villages of the mabálkari's division. The products of the dry crop tillage commanded equally good prices with those of the neighbouring parts of Bankapur to the north. The prices of the products of watered land were considerably lower, as the produce was greatly beyond the local demand and nearly all the surplus passed north. As rice and raw sugar were the chief exports, and their prices ruled lower in Hangal than in Bankapur and still more than in Hubli, rice and garden soils were at a disadvantage.

The diagram for the 160 Hangal villages shows that, during the twenty-one years ending 1846-47, of a total of about 92,000 Government arable acres, the tillage area varied from about 44,000 acres in 1834-35 and 1837-38 to about 32,000 acres in 1846-47. During the five years ending 1824-25 the net rental varied from about £8900 (Rs. 89,000) in 1822-28 to about £7200 (Rs. 72,000) in 1823-24 and averaged about £8200 (Rs. 82,000). During the twenty-two years ending 1846-47 it varied from about £7300 (Rs. 73,000) in 1842-43 to about £4100 (Rs. 41,000) in 1836-37 and averaged about £6200 (Rs. 62,000). From 1826-27, the first year in which the tillage area was entered in acres, to 1837-88, that is for twelve years tillage had slowly spread and again from 1837-38 to 1846-47 it had slowly shrunk. The change was chiefly due to the stoppage of the practice of granting waste on specially easy terms. For 1846-47 the collections on account of drycrop land were £1945 (Rs. 19,450) and those on watered land £374 2 (Rs. 37,420). Of the latter sum £2904 (Rs. 29,940) were obtained from the rice and £748 (Rs. 7480) from the garden cultivation. The assessment was unequal rather than excessive.

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¹ The details are: From nearly 36,000 acres in the two years ending 1827-28 Tillact rose to about 37,500 acres in 1828-29, and after falling to about 35,000 acres in 1820-30 again rose to about 37,500 in 1830-31; from about 36,000 acres in 1831-32; it steadily rose to about 41,000 acres in 1831-35; during the six years ending 1810-41 it varied from about 41,000 acres in 1831-32 it steadily rose to about 82,000 in 1810-42; at steadily fell to about 32,000 in 1846-47. From about 18, 82,000 in 1820-21 the Net Rental steadily rose to about Rs. 89,000 in 1822 23, and, after a fall to about Rs. 72,000 in 1825-26 it steadily rose to about Rs. 77,000 in 1824-25; from about Rs. 62,500 in 1825-26 it steadily rose to about Rs. 65,000 in 1822 29 and steadily fell to about Rs. 47,500 in 1831-32; after steadily rising to about Rs. 71,000 in 1831-35 it again fell to about Rs. 41,000 in 1836-37; from this it steadily rose to about Rs. 73,000 in 1812-43 and fell to about Rs. 57,000 in 1816-47. During the ten years ending 1832-33 Remissions varied from about Rs. 21,000 in 1831-32 to about 18, 5000; during the five years ending 1830-31 they were about Rs. 16,000; during the five years ending 1810-41 they varied from about Rs. 37,000 in 1846-47 they varied from about Rs. 48,000 in 1841-42 to about Rs. 31,000 in 1846-17. Diagram in Survey Report 15 of 26th January 1819, Bom. Gov. Scl. CLVI

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The average drycrop acre rate varied from 7s. 1½d. (Rs. 3 as. 9) to 1½d. (1½ as.); and that of rice land from £1 7s. 1½d. (Rs. 13 as. 9) to 1s. 9¾d. (14 Tg as). The average garden acre rate was £1 tī. 10½d. (Rs. 18 as. 15). As regarded the cost and profit of rice and sugarcane tillage in a maluád or wet village, the estimates showed, in the case of three acres of rice and one and a half-acres of sugarcane, a rental of £2 5s. (Rs. 22½) for 4½ acres at Rs. 5 as acre; a cost of tillage amounting to £7 8s. (Rs. 71½); and a crop return worth £16 4s. (Rs. 162); that is, a balance of £6 16s. (Rs. 66). With respect to cotton and jvári tillage in plain villages, the estimates showed, in the case of seven acres of jvári and siz acres of cotton, a rental of £1 15s. 9d. (Rs. 17¾) for thirteen acres at 2s. 9d. (Rs. 1½) the acre; a cost of tillage amounting to 1s. (8 as.); and a crop return worth £6 17s. 6d. (Rs. 66½); that is a balance of £5 0s. 9d. (Rs. 50¾).

The Hangal sub-division was thinly inhabited and the villages were generally small. Everywhere were large tracts of waste and especially in the west much land was covered with dense forest. Though the landholders were better off than in the neighbouring districts, sickness had for many years checked the increase of population. The prevailing diseases were cholera and small-pox, guineaworm and fever were also common.

The 161 Government villages were divided into four classes with drycrop acre rates varying from 3s. to $2\frac{\pi}{4}d$. (Rs. $1\frac{1}{2}$ - $1\frac{\pi}{4}as$.). The first or plain class contained thirty-six villages to the east of Adar enjoying a climate well suited to drycrops. The second class included thirty-one villages lying west of the first class in which the fall of rain was slightly but not seriously too heavy for drycrops. The third class contained fifty-one villages still further west in which the fall of rain was still more prejudicial to drycrop husbandry. The fourth class contained forty-three villages in the immediate neighbourhood of the Kanara forests. The drycrop acre rates varied in the first class from 3s. to 3d. (Rs. $1\frac{1}{2}$ -2as.); in the second from 2s. $5\frac{1}{4}d$. to $3\frac{1}{4}d$. (Re. 1 as. $3\frac{1}{2}$ to $2\frac{7}{4}$ as.); in the third from 1s. $10\frac{1}{2}d$. to $3\frac{2}{3}d$. $(15-2\frac{1}{2}as.)$; and in the fourth from 1s. 3\$d. to 2\$d. (10\frac{1}{2} - 1\frac{1}{4} as.). These rates lowered the existing drycrop assessment on cultivated land in the first and second classes of villages and raised it in the third and fourth. The details are:

1 These estimates do not include the additional expense on account of bullockhire and wages for labour. Bom. Gov. Sel. CLVI. 164. 2 In the case of a wet village the details were: Rent for 45 acres at Rs. 5 the acre.

² In the case of a wet village the details were: Rent for 4½ acres at Rs. 5 the acre, Rs. 2½; cost of 6000 pacces of sugarcane for seed, Rs. 6; cost 27 chitds ofrice for seed, Rs. 2½; cost of making raw sugar at Rs. 3½ the goni, Rs. 63; total, Rs. 9½. Three acres of rice yielding 12 gonis of 32 chitds each at Rs. 3 the goni, Rs. 152; total Rs. 162. Balance to the landholder, Rs. 68. In the case of a plain holding the details were: Rent of 13 acres at Rs. 1½ an acre, Rs. 171; cost of 2 mans of seed cutton at 2 as, the man, Rs. ½; cost of tur and irdni for seed (say) Rs. ½; total Rs. 18½. Seron acres of jrdni yielding 10½ gonis at Rs. 2½ the goni, Rs. 26½; 3½ gonis of tur grown between the drills of the jrdni at Rs. 2½ the goni, Rs. 8½; 6 acres of cotton yielding 18 mans of clean cotton at Rs. ½ the goni, Rs. 8½; 6 acres of cotton yielding 18 mans of clean cotton at Rs. ½ a man, Rs. 27, and 54 mens of seed at 2 a. a man, Rs. 6½, total Rs. 33½; total Rs. 63½. Balance to the landholder, Rs. 50½. Bom. Gov. Sci. CLV1. 164.

3 Bom. Gov. Sci. CLV1. 109.

Hungal Dry-crop Land Settlement, 1847-48.

			1840	3 47.			Scrvet	
Class.	Vil- lages	Dry Crop.	Tillage.	Assessinent on Tiliage.	Average Acro Rate.	Dry Crop.	Total Assess- ment.	Average Acro Rate.
I II III IV	36 31 61 43	Acres, 21,500 18,518 21,642 43 180	Acres, 9223 4730 4784 2710	Rs. 12591 4371 1535 056	Rs. a. p 1 6 1 0 14 8 0 5 1 0 2 10	Acres. 24,500 17,000 17,500 33,000	Rs. 34,500 11,687 9'62 10,312 50,061	Rs. a. p 1 0 0 0 11 0 0 9 0 0 5 0

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The rice acre rates varied from 10s. (Rs. 5) to 1s. 6d. (12 as.). The higher rates above 4s. (Rs. 2) were for rice and sugarcane lands, and the lower rates for rice lands only. These survey settlement rates reduced the average rate of assessment on the whole rice lands under tillage from 5s. 10td. (Rs. 2 as. 14th) to 4s. 41d. (Rs. 2 as. 3), or, inclusive of waste, from 5s. 7d. (Rs. 2 as. 123) to 4s. 3d. (Rs. 21). This was equal to a reduction of seven per cent in both cases. The principal garden villages were Narcgal, Alur, and Haugal in the mamiatdar's charge. Of these Naregal and Alur were supplied with water from the dams on the Dharma river. The highest pond garden acro rate was £2 (Rs. 20), and the well garden rate 10s. (Rs. 5). These survey settlement rates lowered the assessment on garden lands tilled and waste from £858 to £600 (Rs. 8580-6000), or the average garden acre rate from £1 17s. 9d. to £1 6s. 6d. (Rs. 18 -13 1). On paying an assessment equal to the drycrop rate on soil of the same quality in cleared parts of the village, landholders were allowed to clear and till forest land, unless it was set apart for timber. The hake or rights of hereditary officers were absorbed in the new rates. The survey rates also included the taxes on sheep and the sale of the produce of fruit trees. The immediate effect of the settlement compared with the land revenue of 1816-47, was, on the same tillage area, a fall of rental from £6400 (Rs. 64,000) to £4800 (Rs. 48,000) or twenty-five per cent. When the whole arable area was brought under tillage the survey rental would show an increase of sixty-eight per cent on the average collections of the twenty-two years ending 1846-47, and of seventy-five nor cent on the 1846-47 collections. The details' are:

Hangal Survey Settlement, 1847-48.

		LECTIONS		1918	
Yein	Tillage Area.	Grazing Fees.	Here- ditary Claims,	Total.	Burvey Assess ment.
1825 - 1847 1816-17	Ila. 61,361 56,876	Rs. 1109 3208	Rs. 4000 4000	Rs. 66,560 64,034	lts. 1,12,000 1,12,000

¹ Bom. Gov. Sel. CLVI. 111.

² Bom, Gov. Sel, CLVI. 110.

Chapter Chapter VIII. La: Land. THE BE SURVEY. Taras. 18. 1847-48.

In 1847-48 the survey settlement was introduced into fifty-four villages1 of the Taras petty division of Hubli.2 Taras was a belt of sixty-three villages lying north and south of the town of Taras. Of the sixty-three villages, fifty-four were Government and nine were alienated subject to a quit-rent. The climate was like that of Hangal, Heavy thunderstorms fell at intervals in May, during which the fields were ploughed and prepared for seed. By about the 10th or lath of June the regular rains generally set in. The late or hingári rains were so slight and uncertain that there was hardly any late or cold weather harvest. Halo Taralgat was the only village with lands suited to the growth of drycrops. The watered lands were of most importance, the revenue derived from them in 1816-47 being about £1100 (Rs. 11,000), compared with £700 (Rs. 7000) from unwatered land. The chief field produce was rice, sugarcane, ragi, sava, til, and kulthi, of which rice and sugarcane were the most important. The manufactures were limited to cotton and woollen stuffs. There were three markets at Taras, Arlikatti, and Dhundshi. From the Taras market, which was held every Tuesday, rice worth about £10 (Rs. 100) was exported and wheat, bijri, and other articles worth about £2 10s. (Rs. 25) were imported chiefly from Hubli, Kundgol, Shirhatti, and Mulgund. From the Arlikatti market, the chief northern centre of trade, every Thursday, coarse cotton cloth worth about £30 (Rs. 300) was sent to Hubli, and oil worth about £15 (Rs. 150) to Sirsi. The Dhundshi market, which was held every Wednesday and Thursday, was the most important in the subdivision. During the six months from the first of December to the setting in of the rains the weekly imports amounted to about £480 (Rs. 4800); during the other six months, the state of the reads prevented traffic. Nearly all the gul or raw sugar and rice of the sub-division and of the neighbouring parts found a market in Dhundshi. Cholera and small-pox were prevalent and mortality was unusually great in Taras. The people were well off. The population, though scattered, was about 2288 to the square mile.3

The diagram for the fifty-four Taras villages shows that during the twenty-two years ending 1840-47, of a total of about 40,000 Government arable acres, the tillage area varied from about 16,000 acres in 1834-35 to about 11,000 acres in 1825-26; and that the net rental varied from about £2700 (Rs. 27,000) in 1834-35 to about £1000 (Rs. 10,000) in 1836-37, and averaged £2000 (Rs. 20,000).

¹ Before the survey the Taras petty division contained fifty-seven villages, but, at the time of the survey settlement, no trace could be found of three villages. The missing lands were probably measured into those of the surrounding villages. Bom, Gov. Sel. CLVI. 121.

2 Capt. Wingate, Survey Superintendent, 15 of 26th January 1848; Gov. Letter

²⁷⁷³ of 16th May 1848; Bom. Gov. Sel. CLVI.

Exclusive of forest, the area was ninety square miles and the population 20,593. Bom, Gov. Sel. CLVI. 177.

From about 11,000 acres in 1825-26 TILLAGE steadily lose to about 15,500 in 1829 30 and fell to about 14,000 acres in 1832-33; it rose to about 16,000 acres in 1834-35; from about 14,000 acres in 1835-36 it rose to nearly 15,000 acres for the next two years, and after a slight fall in the two years ending 1839-10 again 10se to nearly 15,000 acres in 1841-42; during the five years ending 1846-47 tillage was nearly stationary at about 14,000 acres. From about Rs. 21,000 in 1825-26 the NET RESTAL

During the twenty years ending 1846-47, there were no remarkable fluctuations either in tillage or in collections. Captain Wingate attributed this to the comparative certainty of the rain and to the large proportion of watered land in the group. That in spite of these advantages tillage had not spread and population had steadily declined was due partly to the prevalence of fatal disease, and partly to the very high rates at which arable waste had been assessed. The average acre rate for drycrop land was 91d. (61 as.) and for rice 6s. 6\$d. (Rs. 8 as. 41). Under the survey settlement, for dryerop lands the villages were divided into four classes on account of difference in climate, the rates being lowered as heavier rain made drycrop husbandry less successful. The highest drycrop acre rate was 3s. (Rs. 11) and the average over the whole four classes was 1s. 03d. (81 as.). The details are:

Taras Dry-erop Land Scillement, 1847 48.

Ì			1810-17.				Surim		
Czquy,	Villages	Dry-erop	Cultivated	Assessinent on Cultivated Area.	Average Acre Ilate	Total Dry erop Area.	Total Assess- ment.	Average Acre Rate	
t II IV	1 24 19 10	Acres. 795 12,447 14,190 6415	Aeres, 787 7397 2169 260	R«. 1560 4818 520 40	Rs. a, p. 1 15 10 0 10 5 0 3 11 0 2 9	Acres 703 12,849 13,000 6500	Rs. 804 9235 4876 1719	Re a p 1 2 0 0 11 6 0 7 0 0 5 0	

In rice lands the highest proposed acre rate was 11s. (Rs. 51), and the average rate on the whole rice land was 4s. 3d. (Rs. 21) and on the tilled portion 4s. 6d. (Rs. 21), or about thirty per cent less than the former rate. Garden land was limited to fifteen acres. The highest acre rate for pond gardens was £1 (Rs. 10) and for well gardens 10s. (Rs. 5). On paying an assessment equal to that of drycrop soils of the same quality in cleared parts of the village, landholders were allowed to clear and cultivate any part of the forest, unless it was set apart for the growth of timber. The extent of land so tilled was to be determined at the yearly inspection of the village lands, and the rate of assessment to be levied was to be settled at tho jamábandi.

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^{10°}c to about Rs. 23,000 in 1826-27; from this it steadily fell to about Rs. 19,000 in 1832-33; after a rise to about Rs. 27,000 in 1834-35 it rapidly fell to about Rs 10,000 in 1836-37; from about Rs. 22,000 in 1837-38 it fell to about Rs. 17,500 in 1838-39; for the next three years it was about Rs. 22,000, and after a fall of about Rs. 2000 in 1838-30; for the next three years it was about Rs. 22,000, and after a fall of about Rs. 2000 in 1838-30; for the next three years it was about Rs. 22,000, and after a fall of about Rs. 2000 in 1842-43 again rose to about Rs. 22,000 in the two years ending 1814-45; from this it steadily declined to about Rs. 19,000 in 1846-47. During the four years ending 1823-29 in. 19830NS varied from nearly Rs. 5000 in 1825-26 to about Rs. 1000 in 1827-28; there were no remissions in 1829-30; in 1830-31 there were about Rs. 5000; during the five years ending 1835-36 they varied from about Rs. 6000 in 1835-36 to about Rs. 1000 in 1831-32; in 1832-33 they were about Rs. 15,000; during the ten years ending 1816-47 they varied from about Rs. 7500 in 1816-47 to about Rs. 2000 in 1839-40. Diagram in Surv. Rept. 15 of 26th January 1818. Bom. Gov. Sci. CLVI 1 Bom. Gov. Sci. CLVI 1. The highest dry-crop acre rates for the four classes were Rs. 1½, Rs. 1½, as. 15, and as. 10½.

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The immediate effect of the survey assessment was that, compared with the 1846-47 revenue, the survey rental on the same tillage area fell from £2050 (Rs. 20,500) to £1660 (Rs. 16,600) or nineteen per cent. If the whole arable area were brought under tillage, the survey rates would show an increase of thirty-four to thirty-six per cent. The details are:

Taras Survey Settlement, 1847-48.

	Corre	TIONS ON ACCOUNT OF		Made 1	1848	
Year	Cultivated Land.	Grazing Fees,	Ifere- ditary Claims.	Total Collec- tions.	Survey Assess- ment.	
1825-47 . 1848-47 .	Rs. 20,467 18,701	. Rs. 377 1823	Rs. 1500 1500	Ra. 29,344 22,029	Rs. 30,000 30,000	

Kod, 1848-49.

In 1848-49, the survey settlement was introduced into the south and north-west portions of the Dharwar district, including 245 villages of Kod, 136 villages of Dhárwár, and 100 villages of the Mishrikot petty division of Hubli.2 Kod formed the southern border of Dhárwar from the Varda to the Tungbhadra. In general shape it was an irregular four-sided oblong figure, with an average length of thirty miles and an average breadth of about sixteen miles. It was bounded on the north by the Bankapur and Rauebennur subdivisions, on the east by the Tungbhadra, on the south by Maisur, and on the west by the Varda river and Hangal. The villages of Kod were numerous and thickly set, especially towards the southwest, but they were (1848) thinly peopled and in some instances were empty. Of 266 villages, 245 were Government and twenty-one alienated. Of the whole number 157 Government and twelve alienated villages were under the mamlatdar of Rattehalli and eighty-eight Government and nine alienated villages were under the mahalkari of Kagnelli. The climate of Kod varied considerably in different parts. The south-west villages which chiefly belonged to the Tilvalli petty division were rainy during the south-west monsoon months (June-October) and the tillage was chiefly rice and other watered crops. A belt of villages close to, and inland of these, had a somewhat drier climate, and in this division both dry and watered crops were commonly grown. Not unfrequently the two kinds of crop were grown together in the same field that, if the season proved too dry for rice, a crop of jvári might be obtained instead. The rest of the sub-division to the north and east of the survey group obtained still less rain. It was unsuited for rice unless with the help of irrigation, but was favourable for drycrops. Long droughts during the rainy season were rare; still, especially in the middle two crop zone, partial failures of the harvest occurred rather frequently owing to the position of the subdivision and the nature

¹ Bom. Gov. Sel. CLVI. 127.

² Captain Wingate, Survey Superintendent, 235 of 21st Dec. 1818, Gov. Letter 1908 of 19th March 1849, Bom. Gov. Sci. CLX, 83, 155.

of the crops grown; because when the rain was heavy enough for rice, it was generally too heavy for drycrops, and when the drycrops flourished the rice languished. Most of Kod consisted of fine swelling plains stretching from the Varda to the Tungbhadra. The only hilly tracts were the small valley of the Masur in the extreme south which was enclosed by rather rugged ranges of hills of considerable height, and a small tract of hilly country west of Kagnelli as well as to the north of Chin-Mulgund where was a picturesque isolated hill in whose stream-beds small quantities of gold were (December 1848) found. Its plains were well watered, being crossed by numerous streams. Many sites on these streams had once been used for making reservoirs of which there were many fine specimens, though mostly in disrepair. The chief rivers were the Varda, the Tungbhadra, and the Kumadvati. All the crops grown in Kod belonged to the early harvest and were sown between June and August. Manure was used in every soil and the husbandry was like, though, perhaps on account of the very high assessment, inferior to that of the neighbouring subdivisions of Hángal, Bankápur, and Ránebennur. To the slovenly character of the ordinary husbandry, the cultivation of the chill was an exception. It was carried on with great care and success in a limited number of villages for the most part to the north of a line connecting the villages of Kod and Kagnelli where the soil and climate seemed particularly well suited to the crop. The chilli was sown in May or in early June in a small plot of well prepared ground, often the backyard of the cultivator's house. From the seed plot, when of some little height, the plants were moved to the field, where they were planted in carefully prepared rows at intervals of two feet. After the field was planted manure was applied by the hand to the root of each plant, and at intervals of eight or ten days the small two bullock plough was carefully passed between the rows of plants, first lengthwise and then across. This ploughing kept the field free from weeds and heaped the earth round each plant. The ploughing was repeated at intervals for about three months until the branches of adjoining plants began to touch and the fruit began to show. The crop was picked by the hand, generally in two pickings of which the first was by far the largest. An acre of good crop was said to yield two loads of eight mans each, and the load occasionally sold as high as 16s. (Rs. 8), a price which yielded the husbandman a most handsome return. The demand was limited and the price was liable to extreme fluctuations. It not unfrequently happened that a year of short crops was better for the cultivator than one of unusual abundance and in consequence of great fall in value. The chilli in Kod was a dry crop and some of the land best suited for its growth was assessed as high as 10s. (Rs. 5) the acre and upwards. Kod had no manufacture of any importance. Nearly the whole population lived on agriculture. Its chief exports were chillis, rice, gul or raw sugar, sugar, oil and oil-seeds, and cotton from the black soil villages. Some of these exports went west to the coast; the rest went north to supply the inland markets. Chillis were also sent east to Madras and These exports were not made by the cultivators but by Maisur.

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traders who bought either at the cultivators' villages or in some of the local markets of which the chief were those of Chikkerur and Thali in Kod, and of Byádgi in Ránebennur. Considerable quantities of raw sugar had lately begun to be sent to Kumta for shipment to Bombay. The outlying position of Kod and the want of reads made the prices of produce, especially of the bulkier field products, much lower than in other parts of the district. Fodder enough to keep a horse for a month sometimes sold for a rupee.

Before the beginning of British rule Kod was almost deserted as most of the people had fled to Maisur. At first they were misembly poor. Since the beginning of British management, population and cattle had been slowly increasing chiefly from the cultivation of alienated land, nearly all of which had fallen waste. Progress had been grievously delayed by the enormous assessment of the Government land of which there was less in cultivation (1848) than there had been twenty years before. Pestilence had had its share in keeping down the population whose numbers at many times during the preceding thirty years (1818-1848) had been greatly thinned by cholera. Throughout the thirty years of British management the area of arable waste was about four times as great as the tillage area. During the ten years ending 1848, in spite of peace security and freedom, the waste was steadily gaining on the tilled land till the tillage area fell to less than one-sixth of the whole arable area. This shrinking of tillage was due to the grievous land assessment. The landholders had lived on remissions. The demand was greater than they could pay in an average season. If by large remissions or by a season of unusual fruitfulness the landholder was able to lay by or to add to his stock, all might be sacrificed to meet the next year's demands. Under these circumstances steady hopeful industry was not to be looked for. If it had not been for the relief given by the lower rates in force in alienated land, Captain Wingate believed that Kod would have been nearly waste. Its thickly crowded villages, the number and size of its irrigation reservoirs, the frequently occurring fruit trees marking the sites of former gardens, and its enormous land assessment which could not have been borne except by very prosperous agriculture, supplied abundant evidence that Kod was once a populous and flourishing sub-division.1 In 1848 all was changed. Its fine plains for the most part lay untilled yielding nothing but rank herbage, and some of its richest valleys, suited for rice and sugarcane, were overgrown with date. Its reservoirs were choked with mud; its once populous villages had dwindled to a few wretched huts, and its active and flourishing landholders were the most poverty-stricken and spiritless peasantry Even in ruin the country was beautiful. in Dhúrwár. accustomed to the tameness of the Bombay Karnatak, delighted in its glistening lakes and grassy glades, fringed with palms

¹ Most of the reservoirs were probably built by the Anegundi kings. The chief of them was the Madag lake whose bank formed the boundary between Dharwar and Maisur. It lay about two miles south of Masur town. The bed of the lake was within Maisur limits, but its waters were intended for the irrigation of Kod. Bom. Gov. Sal CLX. 87. Details are given above under Agriculture, 200-263.

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SURVEY.

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mangoes and tamarinds.¹ The three years ending 1827-28, which were years of gradual increase of tillage, were succeeded by four years of steady decline. During the ten years ending 1840-41 the tillage area was constantly though slightly changing and in 1840-41 it was about 56,000 acres. From this it almost steadily fell to about 38,000 acres in 1847-48. From 1828-29 there were four years of steady decline in the rental followed by three years of steady advance. During the five years ending 1839-40, the rental varied from about £9700 to about £8900 (Rs. 97,000-Rs. 89,000). The seven years ending 1847-48 were marked by a nearly steady fall in the rental from about £12,000 to about £8500 (Rs. 1,20,000-Rs. 85,000). The details² are:

Kod, 245 Villages: Tillage and Revenue, 1820-1848.

		١		TILLAGF.		Waste	O14	Net Land
Y'E	AR.		Area.	Rental.	Remis- sions.	Revenue	Quit Rent.	Revenue.
1820-21 1821-21 1822-24 1823-21 1824-25 1825-26 1825-26 1825-26 1822-20 1820-30 1820-30 1831-32 1831-32 1831-32 1831-32 1831-32 1831-33 1831-34 1831-35 1831-35 1831-35 1831-36 1831-3			48,024 54,841 56,489 58,601 51,918 49,194 49,443 58,254 58,254 58,254 58,254 58,255 58,254 58,255 58,255 58,255 58,255 58,255	98,015 91,187 86,573 79,267 81,11344 1,11,344 95,383 91,205 93,995 97,131 89,161	5790 18,676 18,317 29,487 14,882 20,774 25,901 52,526 24,723 24,710 5247	Rs 4130 4209 4465 4171 609 2825 3100 3116 3241 3397 4120 1435 1651 1679 1702 1833 1838 3046 9355	Rs 59,013 60,650 58,970 56,984 54,023 57,733 50,990 48,225 39,754 31,764 46,151 46,141 46,630 29,805 47,492 52,867 52,067	Rs 1,51,090 1,59,024 1,66,291 1,47,966 1,40,576 1,29,580 1,40,546 1,52,418 1,23,904 1,12,190 83,077 1,03,381 1,24,601 1,12,176 1,16,711 70,186 1,16,711 1,21,754 1,16,711 1,21,754
1841-42 1842-43 1643-44 1844-45 1845-46 1846-47 1847-48	:: :::		55,879 53,160 44,419 39,587 37,363 38,187 37,878	1,18 711 1,20,271 99,043 87,437 82,089 85,833 85,269	3269 38,635 26,581 23,704 29,745 24,303 24,138	2799 3398 4305 (862 8460 9203	54,598 51,797 49,690 45,400 40,117 41,673 48,059	1,44,039 1,36,831 1,27,057 1,16,035 1,01,820 1,12,614 1,13,253

A comparison of the collections and the tillage area during the twenty-three years ending 1848 shows that the average drycrop acre rate was 2s. $2\frac{1}{4}d$. (Re. 1 as. $1\frac{1}{2}$), the average rice acre rate 5s. $3\frac{3}{4}d$. (Rs. 2 as. $10\frac{1}{2}$), and the average garden acre rate 15s. $7\frac{1}{4}d$. (Rs. 7 as. $12\frac{5}{6}$). The details are:

Kod Tillage and Revenue, 1825 - 1848.

	Aver.	Average, 1825 - 1848.			Average, 1843-1848.			
LAND.	Trilage.	Collec-	Acre Rate.	Tillage.	Collec- tions.	Acre Rate		
Drycrop Rice Garden	7993	Rs. 45,619 21,222 0660	Rs. a. p I 1 6 2 10 6 7 12 10		Rs. 38,638 18,617 6378	Rs. a. p 1 2 8 3 1 9 8 9 3		

¹ Bom. Gov. Sel. CLX. 85. ² Bom. Gov. Sel. CLX, 134-135. ³ Bom. Gov. Sel. CLX. 97.

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 1848-49.

At the time of the settlement (1848) the Kod sub-division was impoverished, its population was scanty, and the area of arable waste was immense. The chief causes were over-taxation and cholera. The survey measurements and classification were begun in 1846 and finished in 1848. The plan followed for the classification of the soil in Kod was the same as that described in the Joint Report by the survey superintendents, dated the 2nd of August 1847 and afterwards approved by Government. A new system was adopted for valuing the supply of water to rice lands. The method was very simple and quite as systematic as that adopted for the valuation of the soil, The varying supplies of water obtainable for the irrigation of rice lands were by this system referred to one or other of the following six classes which were found sufficiently numerous for an equitable distribution of the assessment. Consistently with the attainment of this object it was desirable to have the number of classes as few as possible, as by this means the distinctions between each were more strongly marked and the work rendered at once simpler and more easily tested. The six classes were: (1) A supply of water abundant for rice and alternating crops of sugarcane; (2) a supply of water abundant for rice and in ordinary seasons sufficient for alternating crops of sugarcane; (3) a supply of water abundant for rice and sufficient for sugarcane in seasons when the fall of rain was unusually heavy; (4) a supply of water sufficient for rice and when the soil was suitable for an after green crop but not sufficient for sugarcane; (5) a supply of water independent of rain that is from ponds or streams for an after green crop; (6) a supply of water wholly dependent on the fall of rain and therefore very risky for rice. The consideration of the results of past revenue management, climate, markets, and relations to other sub-divisions already settled, led Captain Wingate to arrange the Kod villages into four classes and propose highest drycrop acre rates of 2s. 9d. (Rs. 1f), 2s. 6d. (Rs. 11), 2s. (Re. 1), and 1s. 61d. (121 as.) The details are:

Kod Dry Grop Land Settlement, 1848-49.

	1	F	ORMER, 1	843 - 184	48. Survey.				
Chare.	Vil- Lages.	Total Dry- crop Land.	Tillage.	Collec- tions	Average Acre Rate	Total Dry-' crop Land.	Rental,	Aver- age Acre Rate.	High- est Acre Rate.
I II . III . IV .	80 134 64 17	Acres. 22,685 112,724 85,831 8534	Acres. 4829 20,947 6462 678	Ra. 5441 28,464 6202 431	Rs. s. p. 1 2 0 1 4 3 0 15 2 6 8 11	22,500 218,500 89,000	78,031 21,937	As. 12 11 0 7	Rs. a. 1 6 1 4 1 0 0 12}
Total	243	174,274	83,006	38,538	1 2 8	180,000	1,19,030	10,5	-

The rice lands were both extensive and valuable but like the dry crop lands most of them were (1848) waste. As in Hingal the rice lands consisted partly of land suited for sugarcane as well as rice from having accommand of water for irrigation during part of the dry season. This more valuable land was limited in area and most of the land was unfit for rice, because of the ruin of the lakes. The difference in the area of rice lands according to the (1825) former and the (1847) present survey was no less than 7000 acres. Much of this

¹ Bom. Gov. Sel. CLX, 99-100.

difference was probably due to land having been entered as rice in the 1825 survey merely because it had once grown rice and was entered as rice land in the village accounts. Still there could be no question that the state of many of the reservoirs had greatly declined in the twenty-three years ending 1848, and that a considerable area had become incapable of irrigation. In 1848 the area of land suitable for rice was estimated at 20,000 acres. The highest acre rate proposed was 9s. (Rs. 4½). Upon the tillage the new rates effected a reduction of about thirty per cent. The details are:

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Kod Rice Land Settlement, 1848-49.

YPAR.	Total Rice Land.	Tillage	Rental.	Average Acro Rate.
1813-1518 . Samey	Acres 27,'00 20,000	Acres. 5943	174. 18,617 40,000	Rs. a. p 3 1 9 2 0 0

The depressed condition of agriculture in Kod (1848) was nowhere more strikingly visible than in the garden cultivation. This was not so much shown by a decline of cultivation and revenue which were less subject to fluctuation than in drycrop and rice lands. It was chiefly apparent in the neglected state of the In many villages the gardens had been gradually declining for years, and in some they were nearly destroyed from neglect. This was owing to the absence of a superior class of landholders rather than to excessive assessment. The garden assessment of Kod, while extremely unequal and in many instances excessive, was on the whole moderate, the average acre rate for the five years ending 1848 being 17s. 17d. (Rs. 8 as. 91). Gardens which had fallen out of cultivation under British management owing to the heaviness of the former assessment had in several instances been given out again at rents so greatly reduced that these could be paid from the produce of the coccanut and other fruit trees without any labour. Several of these gardens though entered in the accounts as cultivated were really waste. The trees were uncared for and from year to year their produce was growing less. The highest acre rate proposed for the pond watered gardens of Kod was £1 10s. (Rs. 15). In Kod the filling of the pends was wholly dependent on the local rainfall. The highest acre rate for gardens watered entirely from wells was proposed at 10s. (Rs. 5). The well garden cultivation of Kod was insignificant. The garden assessment at the proposed rates was estimated to yield £700 (Rs. 7000) or an average acro rate of 13s. (Rs. 61) on the entire garden land, and 14s. (Rs. 7) on the existing (1848) cultivation. The full survey rental of the whole Government land of the sub-division was estimated at £16,600 (Rs. 1,66,000). Compared with the average of the five years ending 1848 (£7314), the survey rental showed an increase of 127 per cent and compared with the average of the twenty-eight years ending 1848 an increase of 102 per cent. The immediate effect of the settlement on the area under tillage in 1847-48 was a reduction of about fifty-two per cent. The proposed rettlement was sanctioned in 1849.1

¹ Bom, Gov. Sel. CLX, 83-110, 155-161.

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Ste	Kod, 1848-49.
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At the time of the settlement (1848) the Kod sub-division was impoverished, its population was scanty, and the area of arable waste was immense. The chief causes were over-taxation and cholera. The survey measurements and classification were begun in 1846 and finished in 1848. The plan followed for the classification of the soil in Kod was the same as that described in the Joint Report by the survey superintendents, dated the 2nd of August 1847 and afterwards approved by Government. A new system was adopted for valuing the supply of water to rice lands. The method was very simple and quite as systematic as that adopted for the valuation of the soil. The varying supplies of water obtainable for the irrigation of rice lands were by this system referred to one or other of the following six classes which were found sufficiently numerous for an equitable distribution of the assessment. Consistently with the attainment of this object it was desirable to have the number of classes as few as possible, as by this means the distinctions between each were more strongly marked and the work rendered at once simpler and more easily tested. The six classes were: (1) A supply of water abundant for rice and alternating crops of sugarcane; (2) a supply of water abundant for rice and in ordinary seasons sufficient for alternating crops of sugarcane; (3) a supply of water abundant for rice and sufficient for sugarcane in seasons when the fall of rain was unusually heavy; (4) a supply of water sufficient for rice and when the soil was suitable for an after green crop but not sufficient for sugarcane; (5) a supply of water independent of rain that is from ponds or streams for an after green crop; (6) a supply of water wholly dependent on the fall of rain and therefore very risky for rice. The consideration of the results of past revenue management, climate, markets, and relations to other sub-divisions already settled, led Captain Wingate to arrange the Kod villages into four classes and propose highest drycrop acre rates of 2s. 9d. (Rs. 11), 2s. 6d. (Rs. 11), 2s. (Re. 1), and 1s. 61d. (121 as.) The details are:

Kod Dry Crop Land Settlement, 1848-49.

		F	orner, 1	849-1848	L ·		Surve	Ţ.	
Class.	VIL- LAGES.	Total Dry- erop Land.	Tillage	Collec- tions.	Average Acre Rate.	Total Dry- crop Land.	Rental.	Acre	High est Acro Rata
I II III IV	30 134 64 17	Acres, 22,585 112,724 35,831 3534	Acres, 4829 20,047 6462 678	Rs. 6441 26,464 6202 431	Rs. s. p. 1 2 0 1 4 8 0 15 2 0 8 11	Acres, 22,500 113,500 59,000 5000		As. 12 11 9	Ra, a. 1 6 1 4 1 0 0 12
Total	245	174,274	33,008	38,538	1 2 8	180,000	1,19,080	10,	

The rice lands were both extensive and valuable but like the dry crop lands most of them were (1848) waste. As in Hángal the rice lands consisted partly of land suited for sugarcane as well as rice from having acommand of water for irrigation during part of the dry season. This more valuable land was limited in area and most of the land was unfit for rice, because of the ruin of the lakes. The difference in the area of rice lands according to the (1825) former and the (1847) present survey was no less than 7000 acres. Nuch of this

difference was probably due to land having been entered as rice in the 1825 survey merely because it had once grown rice and was entered as rice land in the village accounts. Still there could be no question that the state of many of the reservoirs had greatly declined in the twenty-three years ending 1848, and that a considerable area had become incapable of irrigation. In 1848 the area of land suitable for rice was estimated at 20,000 acres. The highest acre rate proposed was 9s. (Rs. 41). Upon the tillage the new rates effected a reduction of about thirty per cent. The details are:

Kod Rice Land Settlement, 1848-49.

YPAR.	Total Rice Land	Tillage	Rental	Average Acre Ra'e
Sauc)	Acres. 27,00 20,000	Acres 80=3	314 16,417 40,000	R*. a. p 3 1 9 2 0 0

The depressed condition of agriculture in Kod (1848) was nowhere more strikingly visible than in the garden cultivation. This was not so much shown by a decline of cultivation and revenue which were less subject to fluctuation than in drycrop and rice lands. It was chiefly apparent in the neglected state of the In many villages the gardens had been gradually declining for years, and in some they were nearly destroyed from neglect. This was owing to the absence of a superior class of landholders rather than to excessive assessment. The garden assessment of Kod, while extremely unequal and in many instances excessive, was on the whole moderate, the average acre rate for the five years ending 1848 being 17s. 17d. (Rs. 8 as. 91). Gardens which had fallen out of cultivation under British management owing to the heaviness of the former assessment had in several instances been given out again at rents so greatly reduced that these could be paid from the produce of the coconnut and other fruit trees without any labour. Several of these gardens though entered in the accounts as cultivated were really waste. The trees were uncared for and from year to year their produce was growing less. The highest acre rate proposed for the pond watered gardens of Kod was £1 10s. (Rs. 15). In Kod the filling of the ponds was wholly dependent on the local rainfall. The highest acre rate for gardens watered entirely from wells was proposed at 10s. (Rs. 5). The well garden cultivation of Kod was insignificant. The garden assessment at the proposed rates was estimated to yield £700 (Rs. 7000) or an average acre rate of 13s. (Rs. 61) on the entire garden land, and 14s. (Rs. 7) on the existing (1848) cultivation. The full survey rental of the whole Government land of the sub-division was estimated at £16,600 (Rs. 1,66,000). Compared with the average of the five years ending 1848 (£7314), the survey rental showed an increase of 127 per cent and compared with the average of the twenty-eight years ending 1848 an increase of 102 per cent. The immediate effect of the settlement on the area under tillage in 1847-48 was a reduction of about lifty-two per cent. The proposed rettlement was sanctioned in 1819.1

Land.
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1848-49.

¹ Bom, Gov. Scl. CLX, 83-110, 155-161.

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Suever.

Didrwdr,

1848-49.

In 1848-49 the survey settlement was introduced into 12 villages of Dhárwár in the north-west of the district. was bounded on the north by Parasgad, on the east by Navalgund. on the south by Hubli, and on the west by Kanara and Bidi. It contained 136 Government and thirty-three alienated villages? In appearance and climate the different parts of Dhárwár varied considerably. The Belgaum-Hubli road divided Dharwar into twee parts. To the north of the road was a level black soil plain peculiars suited to the growth of drycrops and containing little watered land; to the south of the road the country was hilly, and the vallers generally given to rice, drycrop culture being for the most part confined to the light soiled uplands. This difference was chieff due to the moister climate of the south division, in which the minul gradually increased towards the Kanara forests. In the north or black plain portion the climate was suited for drycrops. The min though generally sufficient was rarely excessive, and droughts, to which the Navalgund villages a little further north-east were very subject, were rare. Tobacco grew freely in some villages, and several vegetables, which in most places required watering, grew well as drycrops. The climate of the north of Dharwar was equal to any in the collectorate; and the neighbourhood of the camp and city of Dhárwar and the presence of the Dhárwár-Hubli road made it as regards markets the most favoured part of the district. In the south of the sub-division the climate was too damp for drycrops; and to the west jvari gave way to ragi and other inferior grains. The camp and town of Dhárwár used almost the whole local produce. A large trading and manufacturing population in different villages throughout the sub-division increased the local demand and kept the prices of produce above the level of any other part of the district. From the same cause little cotton was grown, though the climate was well suited for cotton. The landholders found it more profitable to raise jvári, from which besides the grain a large return was obtained by the sale of the straw in Dharwar and in the villages along the Belgaum-Hubli road. Considerable quantities of tobacco were grown in certain villages and it was considered a paying crop. Wheat also was grown sparingly throughout the black plain or north portion of the sub-division, but the early or monsoon jvári was the great staple, except in two or three of the most outlying villages where, in consequence of the more precarious fall of rain, the cultivators occasionally tried the white or cold weather variety. In the hilly or south division, rice and sugarcane were the most valuable crops and like the products of the plain division found a ready sale at Dhárwar. In this Dhárwar sub-division the drycrop land revenue was much more important than that obtained from the rice and garden lands. Manure was everywhere used except in a few villages which had the benefit of wood ashes.

Of the Government villages three had long been lost sight of in the forest tracts and could not be traced. Their lands were therefore included within the limits of adjoining rillages. One village was surveyed and assessed before its transfer from Navalgund to Dhárwár. Bom. Gov. Sel. CLX. 111, 117.

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Land.

SURVEY.

Dharwar,

1848-49.

For about 113 years after the fall of Anegundi (1573) Dhárwár, under the nominal rule of Bijapur, was in a great measure left to the hereditary officers. This period is described as one of unbroken suffering. It next fell under the Moghals whose rule lasted sixtysix years and was generally liberal and prosperous. The Maráthas succeeded, and one of their first measures was to raise the assessment by trebling the ancient Anegundi rakam or standard The new standard could not be collected and required the constant aid of leases or kaule and similar abatements to give it even a nominal existence. In 1790 the town of Dharwar and many neighbouring villages were plundered and burnt by Parashuram Bhau Patvardhan and from 1790 to 1817 the whole sub-division continued to suffer from similar outrages.1 Though the importance of Dhárwár fort made the neighbourhood specially liable to the spoliation of contending armies, the presence of the garrison secured to the husbandmen a good local market for their produce. On the whole it seemed to have suffered less than most parts of the district from the disorders that preceded the occupation of the country by the British. Under British management the sub-division generally prospered though its agriculture remained stationary if not declining. The large thriving town of Dharwar may be said to have grown up within this period, and the population of other places also considerably increased According to Captain Wingate over-assessment had prevented an advance in agriculture. As in other sub-divisions the collections in the first few years of British rule were very high; this gave rise to an exaggerated estimate of the capabilities of the sub-division, and this was made the basis of the assessment of the first survey which was introduced in 1825-26 and had since formed the ground work of the yearly settlements. Cultivation declined steadily for the first eight years (1825-1833) subsequent to the introduction of the former survey when the collections were generally high. In the nine years ending 1812 owing to remissions and leases the collections were smaller and tillage spread. In the three years ending 1815 the cultivation once more rapidly declined Finally in the three years ending 1818 there was a considerable increase due chiefly to the survey and the approaching revision of assessment. The details are:

Dharrar, 131 Villages: Tillage and Revenue, 1820-1848.

,—		Tillage		Wasto	Quit	Net land
YFCP	Ares.	Rental	Remls slons	Revenue	Hent	Revenue
1920-01 1621-22 1422-27 1421-21 1821-25 1821-27 1821-27 1821-27	Acres 62,140 62,647 61,699 69,002 61,202	1,45,976 1,47,717 1,48,770 1,44,112 1,33,312 1,22,024	65,321 49,012 40,200 30,632	Rs. 140 207 2161 1912 1030 1636 2102 1813 2104	11# 01,101 01,8 0 87,720 64,055 65,141 64,014 85,749 64,100 82,100	184 1,73,743 1,75,820 1,79,001 1,50,701 1,44,729 1,49,109 1,50,974 1,02,057 1,64,634 1,93,463
1929 30 . 1930 31 . 1831-32	60,977	1,21,691	57,117	2601	75,020 70,118	1,44,030

DISTRICTS.

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Dharvar, 131 Villages: Tillage and Revenue, 1820-1845-continued.

YEAR.		Tillage,		1			
	Ares.	Rental.	Remis- alons	Wasto Revenue	Quit Rent.	Net Lan Revenue	
1842-48 1813-44 1844-45 1845-46 1846-47	55,558 61,888 61,736 62,409 68,865 53,981 50,300 51,158 9,434	1,21,630 1,22,443 1,22,782 1,16,140 1,03,195 99,916 99,726 18,575	Re. 62,470 59,977 29,357 40,116 48,712 28,832 41,067 21,077 17,003 13,465 9730 7610 0,699	3195 3294 3841 4861 4316 6941 6193	3,213 3,258 4,460	Rs. 1,14,607 1,24,512 1,55,755 1,40,674 1,33,153 1,57,834 1,18,780 1,60,149 1,60,615 1,45,084 1,44,979 1,50,193 1,51,193 1,51,193 1,51,193 1,51,193 1,51,193 1,51,193 1,51,193 1,51,193 1,51,193 1,71,525	

The survey was begun in 1846 and finished in 1848. The 182 Government villages were arranged in seven classes with highest drycrop acre rates varying from 4s. 6d. to 1s. 9d. (ils. 21-14 as)

Dhdrwdr Dry Crop Land Settlement, 1848-49.

	FORMER, 1825-1848.			70-40.					
CLARR	VIL.	Total	1	·			Su	YEY.	
			Trilage.	Collec- tions.		Total Dryerop Land.	1	Average Acro Rate.	Acre
III IV VI Total	183 1	16,183 11,901 19,724 12,479	4412 8448 5541 1286	59,350 4271 3864 1991 1791 270	0 5 2	3840 49,000 4476 16,000 10,000 17,000 11,000	67,375 5748 10,500 5812 7909 4469	Rs. n. 1 1 9 1 6 1 5 0 101 0 81 0 74	Rate. 2 4 2 0 1 12 1 12 1 18 1 14 0 14

As the sixth and seventh classes were close to forests, and had a rainy climate, the poorer lands in them yielded an abundant herbage during seven or eight months of the year. In these places the new rates enhanced the drycrop assessment. In other lands the proposed rates were below the past averages. The area of rice land in Dharwar was not large. It was nearly confined to the portion of the sub-division south of the Belgaum-Hubli road, that is to the fourth, fifth, sixth, and seventh classes of villages. At the introduction of the 1825 survey settlement 3804 acres were under rice. An unbearable assessment had reduced this to 2874 acres in 1845-46. During the two years ending 1848 a portion of the waste had been brought under tillage in anticipation of the new settlement. There were (1848) in all about 6000 acres of rice land of which nearly half were waste owing to the oppressive nature of the existing assessment. The highest acre rate was £1 4s. (Rs. 12) and the average acre rate on the cultivation of the twenty-three years ending 1848 was 7s. $\frac{1}{3}d$. (Rs. 3 as. $8\frac{7}{12}$), and on that of the five years ending 1848, 7s. 112d. (Rs. 3 as. 15 17). The highest acre rate proposed in the 1848 settlement was 16s. (Rs. 8) for the first,

second, fourth, and fifth classes of villages; there was no rice land in the third class; the sixth and seventh classes were less favourably situated, being removed ten to fifteen miles from Dharwar and the high road to Belgaum; on this account the highest acre rate proposed for them was 14s. (Rs. 7). The details are:

Dharoar Rice Land Settlement, 1848-49.

	FORMER, 1825-1848			Stript			
Total Rice Land.	Tillage.	Collec-	Average Acre liste.	Total Rico Land.	Rental.	Average Acre Rate,	Highest Acre Rate.
Acres. 5123	Acres. 3154	îls. 11,150	Re a. p	Acres. 6000	Its. 15,750	Rs. a. p. 2 10 0	Rs. {8 7

Garden lands were of very limited extent, 360 acres, of which 287 were under tillage at an average acre rate of 16s. d. (Rs. 8 as. $\frac{7}{10}$). . This land was generally inferior to that of the southern sub-divisions and was for the most part devoted to the raising of vegetables for the Dharwar market. The highest acre rates proposed were £1 10s. (Rs. 15) for pond-watered gardens and 10s. (Rs. 5) for wellwatered gardens. The average acre rate was estimated at about 10s. (Rs. 5). The full survey rental of the whole Government arable land of the sub-division was estimated at £12,500 (Rs. 1,25,000) which, compared with £10,044 (Rs. 1,00,440) the average collections of the twenty-eight years ending 1848, showed an increase of 241 per cent, and, compared with £9872 (Rs. 98,720) the average collections of the five years ending 1845-46, an increase of 261 per cent.1 cultivation was more widespread in Dharwar than in any previously settled sub-division, the new settlement did not hold out so large a prospect of eventual increase of revenue. The immediate effect of the settlement on the average collections of the five years ending 1845-46 was a reduction of about ten per cent. The proposed settlement was sanctioned in March 1849.2

In 1848-49 the survey settlement was introduced into 100 Mishrikot villages in the west of the district. These 100 Government villages together with twenty-four alienated villages for mod the Mishrikot petty division of Hubli. It was bounded on the north by Dharwar, on the east by the mamlatdar's and Taras mahalkari's divisions of Hubli, and on the south and west by Kanara. The surface of Mishrikot was waving and much of the south and west was (December 1848) overrun with forest. Passing from the north-east to the Khnara forests the climate rapidly became more rainy. It was in all parts overmoist for drycrops, though drycrops were much grown along the castern border. The westerly villages were very thinly

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> Mishrikot. 1848-49.

¹ The period of five years ending 1845-46 has been taken for comparison, because, according to Captain Wingate, from 1816-47 the effect of the present survey operations in increasing the revenue first became decidedly apparent. Captain Wingate, Survey Superintendent, 235 of 21st December 1848, Bom. Gov. Sel. CLX. 122.

² Captain Wingate, Survey Superintendent, 235 of 21st December 1818, Bom. Gov. Sel. CLX. 111-123; Government Letter 1908 of 19th March 1819, Ditto 155-161.

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St. Mishrikol,
15 1848-49.

peopled and many of them were empty. There was very little tillage, and no great spread of tillage could (1848) be looked for without an increase of population. The chief produce was rice and the revenue from watered lands was more than double the drycrop revenue All over the petty division were many small neglected reservoirs. Owing to a moderate assessment and to a good market for their rice, the landholders were better off than in other rice-growing parts of Dharwar. From the introduction of the 1825 survey, tillage had fluctuated very little. At the same time it had steadily though slowly spread. The amount of yearly remissions was small. The assessment was therefore comparatively moderate but it had not been light enough to allow any rapid spread of tillage or the proper development of the agricultural resources of the petty division which were very great. During the twenty-three years ending 1847-48, the tillage area slowly rose from about 15,500 acres in 1825-26 to about 22,500 acres in 1847-48. During the twenty-eight years ending 1847-48 the netrental varied from about £6500 (Rs. 65,000) in 1843-44 to about £2440 (Rs.24,400) in 1896-37, and remissions varied from about £1850 (Rs. 18,500) in 1836-37 to about £4 (Rs. 40) in 1821-22. The details are:

Mishrikot, 100 Villages: Tillage and Revenue, 1820-1848.

	7	illage.		Waste		Net		7	lillage.		Waste	٠	Net Land
Year.	Aron.	Ren- tal,	Re- rais- sions.	Rese- nue.	Rent.	Land Ro- come.	Year.	Area.	Ren- tal	Re- mis- sions.	Rese- nue.	Rent.	Re- venne
	Aeres.	Rs.	Ro.	Rs.	Rs.	Ra.		Acres.	Rs.	Ra.	Rs.	Rs.	Rs.
1820-31	***	32,234	574	160	12,343	44,163	1834-35	20,305				16,656	
1891-22.		38,531	41	141	15,855	53,986	1835-36	17,750	84,153	6035		16,990	
1822-23			 .	146	15,544	55,465	1836-37	18,497	32,640	18,520		10,116	
1823-24		41,251	10,790	189	14,997	45,603	1837-33	29,168				14,201	
1824-25.,] ˈ	41,208	3916	154	14,829	52,245	1838-50	19,450				12,436	
1825-26	15,519	38,772	3446	147	17,078	50,651	1839-40	18,498				14,89	
1828-27	16,978			145	16,432	50,4B1	1840-41	20,238				14,627	
1827-28	17,123	35,075	4478	186	14,723	46,058	1841-42	21,960	35,348	1610		29,980	
1828-19	18,399	34,097	210	137	14,703	46,717	1842-43,.,	21,639	34,710			30,221	
1819-50	18,183			133	18,216	39,869	1843-44	21,890	35,328	1882	1289		
1830-81	1B,8B3	84,520	6274	126	14,405	48,777	1844-45	20,215	33,161	480		30,605	
1831-32	17,277			136	13,800	89,163	1845-46.,.	21,229	32,885			29,910	
1832-33	17,044			122	12,446	37,193	1848-47	22,163	33,268		2106		
1833-34	17,439	33,8B1	3382	134	14,804	44,937	1847-49	22,510	42,417	9450	1039	30,148	81,7%

The survey was begun in 1846 and finished in 1848. The area of Government drycrop land in the 100 Mishrikot villages was about 76,000 acres of which only 14,500 acres were (1848) under oultivation at an average acre rate of 1s. 3d. (10 as.) as deduced from the collections of the preceding five years. It was proposed to divide the villages into four classes with highest drycrop acre rates of 2s. $7\frac{1}{2}d$. (Rs. $1\frac{5}{15}$) diminishing to 1s. 3d. (10 as.), as the climate became more rainy and unfavourable for drycrop culture. The details are:

¹ Bom. Gov. Sel. CLX, 138-139.

Mishrikot Dry Crop Land Settlement, 1848-49.

			FORMER, 1	843-1849	3.		Sur	VEY.	
CL188.	Villages	Total Drycrop Land.	Tillage.	Collec- tions.	Average Acro Rate.	Total Drycrop Land,	Rental.	Average Acre Rate,	Highest Acro Rate.
I III IV	21 27	Acres. 3641 17,109 18,030 45,594	Acres. 944 6847 4011 1990	Rs. 954 5953 2321 732	Rs. a. 1 03 0 12 0 9 0 64	Acres 3400 17,000 16,000 40,000	Rs 2025 9562 6500 11,250	As. 13 9 61 41	Re a. 1 6 1 11 0 24 0 10
Total	100	84,007	13,792	9060	0 10]	70,600	30,237	6}	

The 8397 acres less of the drycrop land according to the 1848 survey were owing to tracts of land which had become covered with dense forest. Rice lands were of considerable extent in Mishrikot amounting to about 15,000 acres of which about 8000 were (1848) under tillage. The rainy climate of the greater part of Mishrikot made it particularly suited for rice. For the rice and sugarcane lands a highest acre rate of 12s. (Rs. 6) was proposed. The details are:

Mishrikot Rice Land Settlement, 1848-49.

r	ORMER, 18	43-1646.		SURVET.					
Total Rice Land.	Tillage.	Collec- tions.	Average Aere Rate.	Total Rice Land.	Rental.	Average Acre Rate.	Highest Acre Rate		
Acres. 14,603	Acres. 8245	Rs 21,958	Rs. a. 2 11	Acres 15,500	Rs. 31,969	Rs. a 2 1	Rs 6		

There was no Government garden land in Mishrikot. If any should be found in the villages remaining to be classified, the ordinary standard, adopted for the collectorate in general, was proposed, that is a highest acre rate of £1 10s. (Rs. 15) for pond gardens and 10s. (Rs. 5) for well gardens. Besides these, as in Dharwar, some of the lands of Mishrikot were covered with forest. Large tracts of this forest land in particular villages in both groups, Dharwar and Mishrikot, were merely measured and their external boundaries marked off without being divided into fields. No assessment was proposed for these forest tracts. Captain Wingate had suggested through the Military Board that a portion of them or other convenient waste should be set apart as public forest for the growth of timber and managed under special instructions distinct from the ordinary administration of the survey settlements. The timber of these forests was being recklessly destroyed. For the rest of the forestcovered arable land it was proposed that if such fields were brought under tillage, the mamlatdar should fix rates of assessment on the area under tillage equivalent to the assessment of similar soils in the same village. Captain Wingate was of opinion that cultivation should not be allowed to extend to these tracts until the arable waste, which had been divided into fields and assessed, was brought under tillage. Till then the natural products of the land in question might be sold on behalf of Government as in the case of ordinary waste subject to assessment. The full survey rental on the Government arable land amounted to £6200 (Rs. 62,000), which,

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> Survey. Mishrikot, 1848-49.

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compared with £3304 (Rs. 33,040) the average collections during the twenty-eight years ending 1847-48, showed an increase of 87½ per cent, and compared with £3510 (Rs. 35,100) the average collections of the five years ending 1847-48, an increase of 76½ per cent. The immediate effect of the settlement was a reduction of about twenty per cent. The proposed settlement was sanctioned in March 1849. For some years before 1848 wild elephants had yearly visited the western borders of Dhárwár and done much damage to the crops especially to rice. The people knew no way of killing wild elephants and allowed them to ravage the fields undisturbed. It was proposed to grant a reward of £5 to £10 (Rs. 50-100) for every wild elephant that might be killed.

Mulgund, 1850-51.

In 1850-51 the survey settlement was introduced into a group of twenty-nine villages in the Dambal aub-division in the east of the district. The survey of these villages was begun in 1850 and finished in 1851. Their area amounted to 106,778 acres of which 10,768 acres were unarable and 96,010 acres were arable.3 When Government took possession of the eighteen Mulgand villages no accounts for previous years were forthcoming. During the time of the Patyardhans, that is from 1790 to 1847, the revenue management of these villages was personal or rayatvár. The assessment was nominally very high, but was never realized in full unless in a year of extraordinary abundance. The collections were made by six instalments which fell due between November and June. A yearly inspection of crops was made, and remissions from one-eighth to three-fourths were given to each landholder according to the state of his crop and his general means. These remissions were granted almost every season, so that in effect the collections were made according to the state of the crop. As the landholders could never hope to pay the full assessment they were always at the mercy of the revenue officers. The officers seldom pressed their exactions beyond endurance. They were generally ready to defer their demands rather than compel a landholder to part with his farm stock. Though so far considerate they allowed the cultivator no freedom of action. He was not allowed to give up any part of his holding when so inclined. He was even required to increase it when the authorities thought he had the means of cultivating more land than he had under tillage. Such extra lands he was allowed to hold at low rates, so as in some

¹ Captain Wingate, Survey Superintendent, 235 of 21st December 1848, Bom. Gov. 1 Sel. CLX, 123-132; Government Letter 1908 of 19th March 1849, Ditto 185-161.

² Bom. Gov. Sel. CLX. 131, 147.
³ Of these twenty-nine villages, eighteen were villages of the Mulgund petry division which formed part of the estate of the late chief of Täsgaon and lapsed to Government at his death in 1843; six were villages of the same petry division formerly held as hereditary by the deed; and deshpinde of Mulgund but resumed by Government in 1850 in consequence of investigations by the Inám Commissioner. At the time of settlement these twenty-four villages formed the charge of the mahálkari of Mulgund in the Dambal sub-division; of the remaining five villages, four were formerly held as an hereditary grant by the Shirhatti desai and resumed in 1847, after enquiry by the Inám Commissioner, and at the settlement time they, formed part of the charge of the mahálkari of Dambal; one village was held by an agent of the Dambal desái, but on investigation by the Inám Commissioner was resumed in 1847 and at settlement time was attached to the charge of the Gadag mimilatdar. Bom. Gov. Sel. CLIV. 187.

measure to compensate for the high rents levied on the rest of his holding. The chief objects of the management were to prevent any diminution of cultivation and to extend it by all available means, so as to exact for the landlord the whole surplus produce beyond what was necessary for the tenant's support, but yet so cautiously and carefully as not to disable the tenant from continuing his cultivation. The two years (1848-50) during which these villages were under British management showed the impossibility of realizing the assessment of the preceding period. In the first year one-fourth of the whole assessment, £1285 (Rs.12,850) out of £5066 (Rs.50,660) were remitted. Still the landholders complained loudly. they found that they were free to give up their land they at once threw up one-fourth of the entire cultivation. In the following season, when the introduction of the new assessment had been promised, a portion of this land was again taken for tillage. In the absence of any trustworthy information as to the amount of past collections in all the twenty-nine villages, in settling the new rates it seemed safest to be guided by those already introduced into the neighbouring villages of the Hubli, Navalgund, and Dambal sub-divisions. The lands were similarly situated in respect of climate and markets, and in those villages the new settlements had been attended with fair success.

The twenty-four Mulgand villages were divided into two classes. The first or the more westerly class, consisting of thirteen villages, formed an elongated belt stretching from the neighbourhood of the town of Navalgund southwards along the Benni Halla; for this group a highest drycrop acre rate of 2s. $7\frac{1}{2}d$. (Rs. $1\frac{\pi}{10}$), sanctioned for the neighbouring villages of Navalgund, was adopted. The second class contained the remaining eleven villages of the Mulgund parguna, which were clustered around Mulgund town and occupied a position immediately south of the Navalgund villages and west of the Dambal villages. For these a highest drycrop acre rate of 2s. 3d. (Rs. 11) was adopted. In this class were also placed the four villages resumed from the Shirhatti desai near the Tungbhadra river, a few miles west of the Dambal hills and among Dambal villages. To the village of Niralgi resumed from the Dambal desai's agent in the north-east of Dambal, a highest drycrop acro rate of 2s. (Re. 1) was applied. For the few acros of garden land a highest acre rate of 10s. (Rs. 5), the same as that sanctioned for well gardens throughout the collectorate, was adopted. The immediate effect of the survey settlement was an increase from £4127 (Rs. 41,270) to £5105 (Rs. 51,050) or twenty-three per cent. There were besides 13,297 acres of waste assessed at £667 (Rs. 6670), to he brought under tillage. Government sanctioned the proposed settlement in April 1852.1

The following statement shows the results of the survey settlement in certain groups of villages, in the neighbourhood of the Mulgand group in Dambal: 2

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Land.

Survey.

Mulgund.

1850-51.

SURVEY RESULTS, 1813-1850.

¹ Captain Wingate, 51 of 31st Dec. 1851, and Gov. Resolution 2509 of 12th April 1852. Bom. Gov. Sel. CLIV. 187-198. ² Bom. Gov. Sel. CLIV. 193.

Chapter VIII.

Chapter

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Land. Survey Results, 1843-1850.

Dharwar Survey Results, 1843 - 1850.

	Three Highe	Village st Acre	es of II Rate I	ubli, is. 1}.		od, Ulch	nges of ? est Acro ! 14.		7631 1	illages o heat Acr	d Navalg s Rate R	mi,
Year.		Till	vão	Ite-	Weste	TH	lage,	Re-	Waste		age.	B.
	Waste	Árca.	ttental	atona.	11 10512	Area.	Rental.	mis- sions,	Magic	Area.	Rental.	tke t
1848-44 1814-45 1815-45 1816-47 1817-48 1818-49 1840-20	2568 1997 1037 793 240	8787 8818 9109 16,457 16,701	8326 9374 10,803 10,619	13 165 10 20	Acres. 9043 8014 2124 1034 846 1573	Acres. 31,648 34,262 39,215 39,603 41,665 42,094	Rs. 20,221 20,157 31,160 31,160 34,754 35,127	Rs. 3515 118 8 17 174	Acres. 4240 2523 740 172 2 631	Acrea. 12,549 14,367 16,300 17,132 17,496 17,022	Ra. 13,103 15,113 17,110 17,076 18,357 17,004	Ra. 1800 51 51 50 50 50 50 50
Increase Decrease		2085	1833	191 197	7475	11,416	8308	**	8716	4473	4739	-

**	Damb	ai, Kig	Villages hest Acr . 1j.	of Rate	Twelri High	e Village iest Acre	s of Bank Rate Ra	:Spur, . 1}.
Year.	Waste	Ti	llage.	Re-	Waste	TII	ige.	Re- mis-
	II ASIC	Area.	Rental.	mis- sions.		Ares.	Rental.	
	Acres,	Acres.	Ra,	Ra.	Acres.	Acres.	Rs.	Rs
1848-44		**	***	-	***	***	411	
1844-45 1846-46	6864	17.003	11,554	iii	***	***	***	
1846-47	8948	22,004	14,623	362	8502	12,097	7705	677
1847-48	4057	21,118		242	8186	12,470	7772 8147	90
1848-49 1849-50	8702 4665	22,071 21,096	34,692 14,043	251	7839	13,200 18,637	8270	
Increase	1976	4093	2488	::	1163	1440	565	12.
}		"	-**	} "			ı .	

1843 - 1855.

In 1854 the settlements were described as wonderfully successful in relieving the landholders from debt and enabling them to secure land-property.1 In spite of the great spread of tillage, produce prices had remained high. Landholders and field labourers had been greatly enriched. Especially near market towns land had risen greatly in value. This rise in the value of land was due to the light assessment, the constancy of tenure, the levying of the land-tax after harvest time, and improved communications which helped the export of surplus produce. The care and labour they gave to their fields, the cost they underwent in watering them, and their readiness to grow fruit trees near wells, on unarable spots, and round their fields, showed that the landholders valued the advantages of the new tenure. Their increased means enabled them to keep more livestock and consequently the fields received more manure and yielded heavier crops. Land might be expected to suffer from the freedom granted to holders to contract or extend their holdings at will. In practice this freedom in no way injured the land. The competition for land was great, and the tenure was safe and good. There was no shandoning of land after it was once taken. Many laudholders held spare land which was sometimes allowed to be overgrown

¹ The Collector Mr. Ogilvy, 2106 of 31st December 1855, and the Rev. Comr. Mr. Reeves, 609 of 26th February 1857. Bom, Gov. Rev. Rec. 17 of 1859, 1399-1406.

with grass, sub-leased, sold, or sub-divided among heirs and relations. Outstandings and remissions had nearly ceased. The prosperous state of the landholders was not accompanied by any loss to Government. On the contrary in 1854 the land receipts were higher than they had been since 1840 and Government further gained by the extension of trade in the district. The returns for the fifteen years ending 1854 showed that over the whole district the area under tillage had risen from 610,392 acres in 1840 to 998,084 acres in 1854, that the revenue for collection had risen from £116,891 (Rs. 11,68,910) to £129,933 (Rs. 12,99,330), and that outstandings had fallen from £2184 (Rs. 21,840) to £17 (Rs. 170). The details are:

Land.
Survey
Results,
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Dhártear Survey Results, 1843-1855.

**	Til	lage.	Remis-	For	Out
Year.	Area.	Rental.	sions.	Collection.	stand- ings.
1840-41 1841-42 1841-42 1842-43 1842-44 1843-44 1845-66 1846-47 1849-9 1849-9 1850-51 1850-51 1852-53 1853-54	Acres. 610,392 650,977 634,874 557,093 670,820 505,879 685,321 729,887 794,046 818,400 818,177 918,201 946,186 952,074	Rs 12,40,336 12,76,344 12,40,025 11,77,623 11,67,602 10,89,833 11,64,482 11,74,526 11,69,026 11,68,107 12,13,623 12,25,107 12,74,219 12,00,852	Ra. 77,427 82,455 71,891 52,574 44,259 1,35,221 40,996 07,349 21,209 32,804 31,200 31,732 31,001 738	Rs. 11,63,009 11,93,899 11,74,094 11,21,665 10,63,343 9,64,162 11,22,496 11,07,177 11,01,641 11,38,222 11,30,907 11,81,801 11,83,416 12,73,511 12,69,332	Rs. 21,843 27,834 23,211 10,189 9084 6008 4934 7783 2522 1544 1572 175

From 1849-50 remissions on account of failure of crops, poverty, and other reasons ceased to be granted; the sums entered under the head of remissions were compensation for abolished perquisites. In 1843-44 the year of the survey settlement, the tillage area was 587,693 acres and the revenue for collection was £112,166 (Rs. 11,21,660); while in 1854-55 the tillage area was 1,076,350 acres and the revenue for collection £137,923 (Rs. 13,79,230). Even after deducting from the tillage and revenue of 1854-55, 78,266 acres of quit-rent lands and lapsed lands not included in the above statement and their revenue of £7990 (Rs. 79,900), there remained an excess of 410,391 acres in tillage area and £17,767 (Rs. 1,77,670) in revenue over those of 1843-44. The town of Hubli was thriving. The wealth, the crowded assemblage, and the earnestness observable on market days at Hubli were (1857 February) truly gratifying.

In 1856 Dhárwár contained 5178 square miles, 1546 towns and villages, and 754,385 people or an average of 145.69 to the square mile. Cotton tillage had greatly increased since the Belgaum-Dhárwár and Kumta road had been finished. The road from Dhárwár to Kalghatgi opened out the town of Dhárwár by the best route to Kárwár in North Kánara. The line joining Hubli with the Kánara frontier by Kalghatgi was turned into a trunk road. The road from Hubli to

1856.

¹ The Rev. Comr. 609 of 26th Feby. 1857, Rev. Rec. 17 of 1859, 1399-1406.

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La Land.

The British, 1856.

Annigeri placed in communication with the western coast, the porth. eastern cotton growing districts of Dharwar and the neighbouring territories of the Nizám and the Madras Government. The Haliya road joining Dharwar with the Kanara frontier was useful for carry. ing timber to Dharwar. Several other roads had also been opened. Some English merchants had formed a project of making a railway from the port of Kanara or Sadashivgad, which, passing by the town of Hubli, was intended to join the Madras and Bombay railway at Belári. At Dhárwar, Indian millet or jvári rupee prices had risen from 123 pounds in 1843 to 76 pounds in 1856.1 There were no canals in the district; 1177 ponds and reservoirs were used to water 50,000 acres yielding a yearly revenue of £11,760 (Rs. 1,17,600). Many other ponds and reservoirs supplied drinking water only. The rules introduced in 1885, enabling the Collector to help the people to make wells, village offices, and other works, had done much In 1854-55, £3654 (Rs. 36,540) were spent on public improvements, of which the people contributed £1450 (Rs. 14,500). Buildings for a cotton gin factory were erected in Dharwar in 1850 at a cost of about £481 (Rs. 4810) and placed under the care of a superintendent of cotton experiments. The culture of New Orleans cotton was yearly increasing. In 1854-55 it covered 63,298 acres. About 300 saw-gins were made in the factory and sold to the cotton growers. The character of Dhárwár cotton was raised in the market and a new impulse given to the cotton trade. In 1854-55, of a total of 2,436,647 acres 1,459,455 were arable, 329,465 waste, and 647,727 alienated. Of the arable acres, 1,076,350 or seventy-four per cent were under tillage, 347,644 acres were in pasture, and 35,461 acres were forest reserves. Of the area under tillage 3840 acres were watered garden land, 64,810 rice land, and 1,008,200 drycrop land. The chief field products were jvári, wheat, rála, sáva, náchni, gram, bájri, pulses, and oilseeds. The exports included cotton, vegetable oils, grain, sugar, chillies, silk, cotton cloths, hides, and horns. The imports were, from the west coast and Kanara, salt, spices, broadcloth, cotton prints, yarn, metals, and timber; and from the interior, handkerchiefs, turbans, and other fabrics, and dyes. Iron ore was found and smelted in considerable quantities in the western laterite ridges and in the Dambal hills. During 1854 the

1	The	det	aile	are .

Dhdrædr.	Indian	Millet	Prices.	1819-1	256
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Year		Pouse						•	Pounds	THE]	Ruppe.	
I EAR	Hubli,	Naval- gund.	Hán- gal	Rod.	Dhár- wár,	YE		Hubli,	Naval- gund.	Hin- gal.	Kođ	Dha:
1843	182 144 98 84 90	120 120 184 123 216 136 130	225 239 228 193 180 102 182	243 243 248 224 221 826 320	123 111 123 96 108 111 120	1650 1651 1652 1853 1854 1855 1856	77777	121 162 108 121 89 71 88	176 102 128 08 70 94 94	356 172 160 920 144 120	320 320 336 320 816 276 200	126 144 146 118 140 92 76

Compiled from Survey Reports.

² Of these jrari covered 39 per cent, wheat 12 per cent, and rice 6 per cent.

rainfall was below the average. The harvest was short, but as prices were high and the Government assessment light, land-holders did not suffer. The rains of 1855 were still less favourable though the failure did not cause scarcity. A deficiency in the latter thunder showers left the wells and reservoirs without their usual stores of water, and, as the dry months advanced, many villages suffered from want of drinking water.

In 1843-44 the tillage area was 587,693 acres yielding a revenue of £112,166 (Rs. 11,21,660). In 1854-55 the area under tillage had increased to 1,076,350 and the revenue to £137,922 (Rs. 13,79,230). Deducting the acquisitions of land from lapses and other causes, the actual increase of tillage since the revenue survey settlement in 1844 amounted to 410,391 acres and the augmentation of land revenue to £17,767 (Rs. 1,77,670). The Collector estimated the acre profit of tillage in watered land at £2 14s. (Rs. 27), in rice land at 16s. 9d. (Rs. 83), in cotton land at 8s. (Rs. 4), and in light soil at 6s. (Rs. 3). The details are:

Dhárwar Tillage Cost and Profit, 1856.

Soil.	Acre Cost.	Assess- ment.	Profit.	Total
Watered Land. Rice Cotton Light soil	Rs. a. p. 20 4 0 6 4 6 2 0 0 2 0 0	Rs. a. p. 6 12 0 2 1 6 1 0 0 0 12 0	Rs. a. 27 0 8 6 4 0 3 0	Rs a 54 0 16 12 7 0 5 12

Of late years the sale value of land especially near towns had risen considerably. A landholder who had more land than he could till with profit made money by sub-letting it, by selling it, or by selling its grass. Between 1846 and 1851 the number of oxen had increased by 34,078 or thirteen per cent; male buffalces by 10,563 or twenty-five per cent; ploughs by 364; carts by 4137; and reservoirs and ponds by 129. The landholders were being gradually freed from debt and showed a tendency to accumulate wealth. Traders were benefited by a sustained demand and a plentiful supply, and labourers by a small rise in wages and still more by continuous employment.¹

In consequence of his rebellion during the 1858 mutinies and his murder of Mr. Manson, the Political Agent of the Southern Marátha States, the Bráhman chief of Nargund was hanged and his estate of forty villages in the north of the district was taken over by Government. Of the forty Nargund villages, thirty-two were under Government management and eight were alienated. In 1859-60 the survey settlement was introduced into thirty-one of the Government villages.² Nargund lay between Dhárwár and Belgaum to the north of Navalgund, to the east of part of Parasgad, and to the

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Survey. Nargund, 1859-60.

¹ The Collector Mr. Ogilvy, 814 of 13th June 1856, Bom. Gov. Rev. Rec. 17 of 1856, 265-375.

² Capt. Anderson, Survey Superintendent, 147 of 29th March 1860, Gov. Res. 1535 of 24th April 1860.

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La Survey.

The Bi Nargund,

Sk 1869-60.

south of Rámdurg and of parts of Parasgad and Bádámi. The villages did not form one unbroken tract, but to some extent were mixed with the Government villages of the neighbouring sub-divisions. From the extreme west to the extreme east of Nargund was about twenty-five miles and from the extreme north to the extreme south about sixteen miles. The river Malprabha ran through the northern part of the sub-division. The soil was chiefly black modified by clay and lime nodules. Near the hills there was quartz land and decomposed felspar of considerable richness. Near the Malprabla and Benni some of the land was subject to overflow and gained by a good alluvial deposit. The soil was suited to the late or rabi cross. It was more particularly favourable to the growth of cotton, wheat, white jvári, gram, and oil-giving plants. The climate was healthy though Nargund town suffered from fever. The rainfall was heaviest at the villages on the Malprabha towards Ramdurg and at Nargund itself, and lightest in the villages to the east from Karamadi to Bairanhatti. A little coarse cloth and a few cotton carpets were made in Nargund. There were nearly 400 looms of which one-half were in Shirol. The chief market town was Nargund. To it came turmeric from Humnabad, buffaloes from Vairág and Bársi, blankets from Bagalkot, cloth and blankets from Belári and Hubli. betelnut and other garden products from Sirsi, and rice from Dharwar. Cotton worth about £2500 (Rs. 25,000) went every year to Kumta, and wheat and gram to Dharwar. The sales of goods in the local Wednesday market averaged about £150 (Rs. 1500). Except after heavy rain the town of Nargund had good communication by cart tracks across about thirty miles of black plain to Dhárwár and Hubli. The population was dense, 224 to the square mile. In 1858-59 the total land revenue was £5928 (Rs. 53,280) and of this £126 (Rs. 1260) were remitted.

The thirty-one Nargund villages were divided into three classes, eleven western villages with a highest drycrop acre rate of 2s. $10\frac{1}{2}d$. (Rs. $1\frac{7}{4}$), eighteen central villages with a highest drycrop acre rate of 2s. $7\frac{1}{2}d$. (Rs. $1\frac{7}{6}s$), and two eastern villages with a highest drycrop acre rate of 2s. $4\frac{1}{2}d$. (Rs. $1\frac{3}{6}s$). These rates included one anna in the rupes of road fund. On the same area under tillage, the survey rental showed an increase of £207 (Rs. 2070) or six per cent. The details are:

Nargund Survey Settlement, 1859-60.

	1	Gov	Government Arable Land.							
CLASS.	VII.	Collec-	Survey Assessment.							
		1858-59.	Tillage.	Waste.	Total.					
i ::	18	Rs. 19,954 13,235 2581	Rs. 20,954 14,368 2516	Ra. 212 429 15	Rs. 21,186 14,797 2591					
Total	31	35,770	37,838	656	38,494					

¹ The levy of the road fund was directed by Gov. Res. 954 of 9th March 1860 paras 12.20. Capt. Anderson, Sorvey Superintendent, 147 of 29th March 1860 para 16.

The thirty-seven acres of Government garden land were rated at 5s. 6d. (Rs. 21) the acre. The settlement period was limited to twenty years.

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The terms of thirty or twenty years for which the original survey had been introduced began to come to an end in 1874. Between 1874 and 1881 the revision of the survey was completed. The result of the revision was an increase in the different blocks from sixty-eight per cent in Hubli to thirty-four per cent in Mishrikot, or over the whole district an increase of forty-seven per cent. The details are:

Revisios Survey, 1674-1681.

Districte Revision Survey, 1874-1881.

	Vn-		1	Restau	
Grotr	FILLE	YPIR	Furrer	, Revis on	lacresse
		_	Ra	Ila.	l'er Ces
liable	47	1574.75	45,172	1 51,173	(१५३)
Navalgun i	51	3h74 75	2,01,501	3,27017	। १०७३
Dambal	23	1474-75		, 4,45,445	. 4940
Rinkspiir	177	1570-77	1,07,931	1,01,4 2	43:0
Hargal Tatzs	1 215	3775 73	1,27,704	1,55,505	1 46 10
Rane bennur	, 120) (1975 79	1,15,035	1,01,177	40 10
Kod .	267	1474 79	1,11,003	5,01,601	\$2 m
I)hirmir .	174	1279 40	1,24,365	1,00,400	(בכי:
311-hrikot	lus	147 253		P1.647	21.20
Mulerrd .	, 2) !	1723 41	(1,533	90,122	្រែល
Total	1219		11,50,710	17,45,479	47:45

Hubli - Navalgund, 1874-75.

The first part of the district into which the revised settlement was introduced was, in 1874-75, into forty-seven villages of old Hubh and eighty-one villages of old Navalgund. The eighty-one villages which formerly belonged to Navalgund had been distributed so that in 1874 sixty remained in Navalgund, seven were handed to Hubh, eight to Ron, three to Dambal, one to Dhárwár, and two to Bádámi in South Bijápur. The forty-seven Hubh villages continued in Hubh.

Hulli.

The forty-seven Hubli villages lay close round the town of Hubli, from which they stretched some distance south. The rainfall in Hubli was, in 1870, 29:44 inches, in 1871, 28:49 inches, in 1872, 25:93 inches, and in 1873, 20:99 inches. At the introduction of the first settlement, the traffic between the Dharwar district and the coast had been carried on pack bullocks. The Ram pass between Belgaum and the Vengurla roadstead was the only cart-road between the Bhor pass near Poons and the extreme south of the Presidency. Several lines of road had since been made converging on Hubli: one to Dhárwár and Belgaum, one from Gadag through Anniger, one from Sholapur through Nargund, and two from Hubli to the coast, of which one was to Kumta by Sirsi and the other to Karwar by Yellapur. These lines caused a convergence of cart traffic to Hubb from all sides. Produce prices showed a rise in uncleaned rice from 111 pounds the rupee in 1819-1823 to 46 in 1873; in jvári from 90 pounds to 42; in wheat from 78 pounds to 25; in linseed from 48 pounds to 31; and in unginned cotton from 1s. 3&d. (101 as.) a man of 271 pounds to 4s. (Rs.2). Under these influences the value of

⁴ Colonel Anderson, Sarvey Commissioner, 151 of 29th January 1974, Gov Res. 2157 of 28th April 1874. Bom Gov. Sal. CXLVIII.

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land had greatly risen. Comparing the average of the ten years ending 1854 and of the nine years ending 1873, the tillage area bit aprend from 36,494 acres to 44,401 acres, and collections from £4042 to £4808 (Rs. 40,420 - Rs. 48,080). The details are:

Hubli Lawl Revenue, 1834 - 1873.

	Oct	2 2125 LA	YD.	Anspir	OUT-	
Ypar	Летез.	Celler- tions.	Remia- alona	Acres.	Aracon- ment.	BYAYD. 140A.
1534-1813 1846-1854 1854-1874 1854-1873	29,073 20,494 43,678 41,404	114. 42,707 40,424 46,079 44,078	11,558 55 55	10,011 10:22 11:2 11:2 02:11	Ra. 110 234 \$20 800	Ra. 82/0 1988

In the forty-seven villages, exclusive of the town of Hubli, the returns showed a rise in population from 23,159 in 1847 to 28,826 in 1873; in flat roofed and tiled houses from 4003 to 5074, in carts from 747 to 1596, in watering wells from forty-eight to 151, in drinking wells from 128 to 181, in drinking ponds from forty-seven in 1844-45 to 100 in 1872, and in watering reservoirs from fifty-seven to sixty-seven. There was a fall in thatched houses from 1027 in 1847 to 736 in 1873; in field entile from 6101 to 5587, in cows and buffaloes from 9062 to 7704, and in sheep and goats from 4496 to 3687. The fall in the number of cattle and sheep was due to the great decrease in the area of waste land.

The climate of Hubli was fair. The villages to the south and west of Hubli generally enjoyed plentiful rain which gradually grow less in the villages north and east of Hubli towards Navalgund. Of the dry soil crops, 60 94 per cent belonged to the early or kharif harvest and 39.06 per cent to the late or rabi harvest.1 Rice was largely grown, and, whon natural advantages allowed, was followed by second green crops of gram, rátáne, mug, and párte. Sugarcano gardens were few. Hubli continued a manufacturing centre of some importance; 4982 hand-looms were at work in 1873-74 against 2263 in 1843. The value of the raw silk yearly used was about £12,000 (Rs. 1,20,000), and of the cotton thread about £20,000 (Rs. 2,90,000). The fabrics manufactured were cotton and silk cloths of all kinds used by the people of the country. Their estimated values were, of silk £1500 (Rs. 15,000), of cotton thread £5000 (Rs. 50,000), and of mixed silk and cotton £50,000 (Rs. 5,00,000), that is a total of £56,500 (Rs. 5,65,000). The country town of Mishrikot furnished a market to the south-west villages which lay furthest from Hubli, Kundgol to those to the south-east, and Dharwar was within easy reach of villages to the west and The landholders were generally well-to-do, north of Hubli. comfortable, and independent; their houses were well built and they had a fair stock of good cattle. Considering the capability of the land, tillage was slovenly. This was due partly to want of people, partly to the very low rates of assessment which enabled landholders

¹ Of the kharif 60 84 per cent the details were juint 40 63, Mjrt 1 04, tur 3 65, mag 1 66, ragi 2 60, malki 1 56, and minor crops 5 26. Of the rabi 30 06 per cent the details were cotton 26 21, wheat 5 21, kusumba 2 08, gram 3 13, and minor crops 2 08. Bom. Gov. Sci. CXLVIII. 160.

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REVISION SURVEY.

Navalgund, 1874-75.

to occupy a larger area of ground than they had either hands or

cattle to till properly.

The eighty-one Navalgund villages all lay in a stretch of black plain country, broken only by the high rocks of Navalgund and Nargund. The Benni stream flowed through the country north to the Malprabha. The area was 347,720 acres. The rainfall in Navalgund was 29.31 inches in 1870, 19.04 inches in 1871, and 20:46 inches in 1872, or an average of twenty-three inches. The means of communication were improved. Average produce price returns showed a rise, in clean rice, from 43 pounds the rupee in 1819-1823 to 22 pounds in 1869-1873; in jvari from 73 pounds to 40 pounds; in wheat from 67 pounds to 32 pounds; and in unginned cotton from 1s. $11\frac{1}{8}d$. $(15\frac{5}{12}as)$ a man of $27\frac{1}{4}$ pounds to 3s. $1\frac{1}{4}d$. (Rs. 176). Linseed had also risen from 68 pounds the rupee in 1819-1823 to 20 pounds in 1871. The result was that land had risen so greatly in value that fifty years' purchase and more were constantly paid even for drycrop soils.¹ Comparing the average of the ten years ending 1854 and of the nine years ending 1878, the tillage area had risen from 182,875 acres to 232,532 acres, and collections from £15,414 to £20,069 (Rs. 1,54,140-Rs. 2,00,690). The details are:

Navalgund Land Revenue, 1834 - 1878.

		Ocet	PIED LAND	ARABLE	WASTE.	Our	
Year.		Acres,	Collec- tions.	Remis- sions.	Acres.	Assess- ment.	BTAND INGS,
1881-1814 1844-1854 1854-1864 1864-1873		130,765 162,875 223,872 232,632	Rs. 1,61,440 1,54,142 1,93,493 2,00,694	Rs. 36,578 5766 3	32,014 23,194 2083 87	Rs. 55,116 18,940 1529 66	ns. 47,966 930 }

In 1874 about seventy-two per cent of the Government lands were tilled by the men whose names appeared as holders in the Government books or by members of their families. The holders tilled about one per cent in partnership with others and let about twentyfive per cent to tenants on a money-rent and about one per cent on a produce or grain rent. One per cent was waste.3 The population returns showed an increase from 71,419 in 1846-47 to 91,323 in 1872-73 or twenty-eight per cent. Flat-roofed houses had risen from 14,252 in 1846-47 to 19,025 in 1872-73 or thirty-three per cent, cows and buffaloes from 18,165 to 18,293 or 0.7 per cent, carts from 870 to 4660 or 435.63 per cent, horses from 450 to 497 or ten per cent, wells from forty-two to ninety, and ponds from 103 to 219. the other hand, thatched houses had fallen from 139 in 1846-47 to ninety-two in 1872-73 or thirty-four per cent, field cattle from 18,025 to 16,326 or nine per cent, sheep and goats from 14,994 to 12,923 or fourteen per cent, and ploughs from 2288 to 1726 or twenty-five per cent.3

Captain Godfrey reports a case in which the same piece of land was sold in 1846-47 for £6 12s. (Rs. 66) and in 1872 for £50 (Rs. 500). Bom. Gov. Sel. CXLVIII. 198.
 Captain Godfrey, 148 of 24th Decr. 1873. Bom. Gov. Sel. CXLVIII. 201.

³ Considering the great spread of tillage, Colonel Anderson (January 1874) doubted the correctness of the apparent fall in the number of ploughs. He thought the early returns had confused between ploughs and scarfers. Bom. Gov. Sci. CXLVIII. 106-107.

Chapter La Ton B Chapter VIII

Reserve brases Sections

Barrenson of the low both on Hall To bothing williamen & man in my to all men at mental flar it many to a at I am. to not though Temperatury of Tyl War to problemant of eeth y of Name of be an brook of a contract and comment In the part it at the property of the part of an Italian grand There are give to the gran, and feel to man All the state of t general or The region of the boy said of a second of the contraction of process while must be made at with the the fore the form products along a right transfer and the first of the street of found and of the gradient of the training to be and the and this the new grown of the body body and the contract of the contrac programs, but you are a series or an entry making making يهرون أو المائم وديد في وما المائل بالأميان والمائيون أ care less than a less and a series of the foreign that the fire a secretary who were a term to be a few The state of the form the father the Cartinuage The flocket to be made at most of months of the materials Book y still all a k, tea e e agus table in a stree (chap) teyés がんしょうしゃ makelm the company that had a top a light by prings الله الأي المراوية المراوية المراوية المراوية المراوية المراوية المراوية والأوراع ما المراوية والمراوية Whomen a make how to be about the partie man the guiden they meaning a material project of months and incomplete yearth manify a surface where or only to a great a ser after 27% . The Harda flee ft Baters, they be my flee of the with the state of the first of the state of For well to a reflect of to time! Tradest the based of the factor with a set to make a mile time the Alle territore in the given a location of the fire a strong on more aparticism. But to the speciment of an experience as at Hilliam It will come or exact they and half

Now a server selected of the control of the discount of market and a particle of the selected of the selected

I The detailer of the only 19 In process were the form Herb, per first, may 1400 control of the only of the only of the first of the only 12 december 281 and press community. I am Gor, by CALVIII, 101

to the south-west of Hubli and on the margin of the rice country, for which the highest dry-crop acre rate was 4s. 6d. (Rs. 21); the fourth class with a highest dry-crop acre rate of 4s. (Rs. 2) contained three Hubli villages, Kusugal, Sul, and Mulhalli, and five old Navalgund villages; the fifth class included twenty-three villages forming the west centre of Old Navalgund for which a highest drycrop acre rate of 3s. 6d. (Rs. 13) was adopted; the sixth class contained forty villages forming the east centre of Old Navalgund which were assessed at 3s. (Rs. 11) the acre of best dry-crop; the seventh class contained twelve villages in the extreme northeast of Old Navalgund forming part of the old Yavgal mahalkari's division of Navalgund; for these a highest dry-crop acre rate of 2s. 6d. (Rs. 14) was adopted. A highest acre rate of 16s. (Rs. 8) was fixed for rice lands. All purely well garden land, except that watered by budkis or water-lifts, was assessed at not more than the highest dry-crop rate on the land which had been garden at the time of the last settlement, and at the simple dry-crop rate on the land under wells which had been made since that settlement. The lands watered by budkis or water-lifts were assessed at not more than 1s. 6d. (12 as.) the acre above the dry-crop assessment. Pondwatered gardens were assessed at a highest acre rate of 16s. (Rs. 8). The new rates gave an estimated revenue of £40,122 against £24,897 (Rs. 4,01,220 against Rs. 2,48,970) collected in 1873-74, that is an increase of £15,225 (Rs. 1,52,250) or 61:15 per cent. The details are:

Hubli and Navalgund, 128 Villages: Revision Settlement, 1874-75.

		For Str	MFR.		REVISION SURVEY.									
CLAPS. VII-		Occupie	d Land.	Occupie	Occupied Land.		ste.	Tol	al.	In- crease	Highest			
	106/3	Area.	Rental.	Area	Rental	Area.	Rent.	Arca,	Rental	on Oc cupied Land Rent	Dry- erop Acro Rate.			
I. II III III IV VI	125 125	44,602	21,545 (379) 29,843 75,616 84,904 21,550 2,48,074	20,000 5 56 29,263 81,694 103,748 30,579 280,625	36,206 6172 50,01 1,24 844 1,31,766 30,921 4,01,225	2103 1400 34 110 288 15 4991	R4 382 886 601 31 114 163 10 2187	Acres 10,224 22,308 0756 20,407 82,101 104,036 30,891 255 619 69,529 235,000	Rs 19,632 37,092 5773 60,614 1,24,978 1,31,029 30,034 4,03,412 83,060 3,20,343	Per cent 73 39 63 0 51 92 73 1 65 1 65 2 43 40 61 15 59 38				

During the nine years before the original survey settlement (1834-1843), the tillage area in the forty-seven Hubli villages varied from about 31,800 acres in 1837-38 to about 26,800 acres in 1842-43, and collections from about £6203 in 1839-40 to about £3570 in 1836-37 (Rs. 62,000 - Rs. 35,700). During the first ten years of the survey lease (1843-1853), tillage rose from about 27,000 acres in 1843-44 to about 39,000 acres in 1852-53, and collections from about £4770 to about £5580 (Rs. 47,700 - Rs. 55,800); during the next ten years (1853-1863) tillage rose from about 39,600 acres in 1853-54 to about 44,000 acres in 1862-63, and collections from about

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REVISION SURVEY.

Hubli.

Hubli, Navalgund. 1874-75.

Hubli.

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£5730 to about £6150 (Rs. 57,300 - Rs. 61,500); and during the last ten years (1863-1873) tillage rose from about 44,000 acres in 1863.61 to about 44,600 acres in 1872-78, and collections from about £6160 to about £6400 (Rs. 61,600-Rs. 64,600). The details are:

Hubli, 47 Villages: Survey Results, 1834-1873.

YEAR.	Rain		Tillagi	.	iges: 81	Wastr.		7	1.		_
	fall.	Area.	Rental.	Remis sions,	Area	Rent	al. in	g Qui	t. Out t. stan	d. Collec	Jei Rup Prio
Before Survey.	In.	Acres.	Rs.	Rs.	Acres.	Rs	_	- -	- Re	<u> </u>	-
1834-85	***	28,782	58,241	E 2000		1			· KB.	Rs.	Lbs
1835-36.	٠.	27,238	51,379	6691	10,600		12 41	05 16,03	ميداء		ŀ
1886-37		29,655	56,107	16,651	12,167			20 13,71			
1837-38	***	31,778	68,196	25,412	0774			12,13			
1848-39	[30,335	20,190	7240	7t60	1 15	1 2	14 15 00	7 735		1 47
1839-40	. [29,506	68,316	17,030	0275		8 30		9 25,61		ΙÖ
1840-41		80 000	54,407	4933	10,038		54	2 (4)			1 70
1841-42		28,031	49,042	4691	11,614	"	100		₹ 40G	0 62,193	l is
1812-43	***	28,408	51,018	11,132	11,551				5 259	69,354	6
1		26,774	48,035	11,380	13,242		100		5 l 6111		10
Surrey.	- 1		''''	-41000	10,272		120	1 13,23	0 91460		in
1843-44]	27,091	36,700			i	1	1		1 ,	
1844-45 .		29,631	20 570	3271	18,457		102	5 14,591		. 1	
1945-46.		31,842	32,573	501	10,015	10,021	1 212	13,081	1215		122
1846-47		01,012	35,161	41	7055	7520	162	14,337 12,289 12,742	693		144
1847-48	••]	35,385	39,218	10	3438	3477		12,288	1 1403	47,634	96
1848-49	**	36,320	40,236	191	8006	3001		12,742	112	52,666	84
1849-50		38,168	39,218 40,236 42,179		1186	2001				83,781	6
1049-00 ,,	* 1	38,320	42,349	- 1		3144		1 12,803		65,476	
1850-51		88,303	42,471	1	1240	1249	406	14,660	***		162
1851-52	- 1:	30,139	43,289	ı	2372	2434	578	I IT.SAS	10,000	65,111	191
1852-53		19,231	43,453	•• 1	1569	1637	529	11,733 11,774	13,639	41,715	162
1853-84	13	0,501	4 1100	• 1	1548	1556	559	17 000		55,550	109 [
101/20	3	10,831	43,827		1385	1393	599	12,711	***	65,785	121 83 71
1022 20	" []	10,831	44,649	110	977	918	391		131	57,295	18
10co PW	. 19	1,740	46,196	- 1	396	518		12,880		57,910	- 3
1957-58	•• 4	2,039	46,521	. 1	167		163	12,875		59,234	88
1007-05	. 4	2,297	46,634 47,117	1	153	93	37	12,817 12,673		59,375	201
18 8 59	. [4	3,060	47,117		103	78	22	12.873	***	80 400	83 81
1859-80	4	3,409	47,356		605	313	107	12,833	***	59,523	81
1860-61	. lā		47,552	***	C23	218	88	12,891	***	60,057	77
1861-62	. 14		47 430	***	134	07	14	19 495	***	00,323	80
862 83!	1 1 2	8,031	47,672	***	184	67	15	13,425	•••	61,001	6
1883 61	- 13		47,760	***	131	67	30	13,710		61,427	49
20105		7127	17,896		101	59		13,727		61,526	ñ
1002 00 1	· 4	,165	7,937		101	68	13	13,5%		61,591	20 20 21
1 85 550	. 49	1.2UI I (17,976		1000		180	11,693	***	61,760	# 1
	. 44	.289 4	18,036		1839 1697	057	1124	14,155		61,256	21
867-89	44	290	18,036		1091	861	974	14,072		07,220	-11
86S-69	. 14		8,084		1697	862	740	14,072	•••	63,032	5
869 70	. 44		8,134	.	1690	858	612	14,105	•••	£5'813	77
870-71 20-			0,104	•••]	2002	983	1312	-7,100	•••	62,501	59
77.70 90.	10 ::		8,182	. [3201	1003	1200	14,116		63,663	56
872-73 25-	20 1 24	639 6	9,184	[2243			14,027		63,499	53
	00 45 ₁	,002 j 4	2 179 I	.	2243 2278		1030 1974	14,029			40

Navalgund.

During the ten years before the original survey settlement (1834-1844), the tillage area in the eighty-one Navalgund villages iell from about 135,000 acres in 1834-35 to about 106,700 acres in 1843-44, and collections varied from about £21,190 in 1839-40 to about £10,400 in 1838-39 (Rs. 2,11,900-Rs. 1,04,000). During the first ten years of the survey lease (1844-1854) tillage rose from about 128,000 acres in 1844-45 to about 205,000 acres in 1853-54, and collections from about £11,070 to £21,770 (Rs. 1,10,700-Rs. 2,17,700); during the next ten years (1854-1864) tillage rose from about 210,000 acres in 1854-55 to about 232,000 acres in 1863-64 and collections from about £22,200 to about £24,000 (Rs. 2,22,000-Rs. 2,40,000); and during the nine years ending 1872-73 tillage rose from about 232,000 acres in 1864-65 to about 233,000 acres in 1872-73, and collections from about £24,200 to about £24,700 (Rs. 2,42,000-Rs. 2,47,000).

Bom. Gov. Sel. CXLVIII. 98, 142-143, 146-147. 2 Bom, Gov. Sel. CXLVIII. 98,144-145, 148-149.

Navalgund, 81 Villages . Survey Results, 1834-1873.

Before Surrey In. Acres Re. Rs. Acres Rs.	Year.	Balm-		Tillage			Waste,		Quit.	Out-	Jan. 1	Jedri
Surrey. 11. Acres Re. Rs. Acres Re. Rs. Rs. Rs. Rs. Rs. Lbs. Ls. L	1 EAIL	fall	Area,	Rental	Remis- slons.	Area.	Rental,		Rent.	stand- ings.	Collec- tions.	Rupee Prices.
185, -6	Surrey.	In.	1			Acres.	Re.	Rs.	Rs.	Rs.	Rs.	Lbs.
1836 37	1831 35 .		135,000	1,91,325	88,101	27,450	61,835	1180		26.546	1.63.484	103
183-62			135,009	1,93,272	82,605					23,109	1.25,401	123
183-79.	1836 37		185,000	2,02,701	44,021						1.56.678	172
1839-40	1821-52"		[185,03]	12.10.000	49.830						1.51.167	101
13,070 2,0,604 20,670 27,470 41,818 022 40,839 20,709 2,11,880 10,1414 11,009 2,0,618 12,007 2,0,001 17,245 17,450 40,157 818 40,698 7,452 14,627,271 11,813 44 100,701 1,74,680 11,381 57,813 1,07,837 8,200 43,610 03,372 1,43,033 12,133 44 100,701 1,74,680 11,381 57,813 1,07,837 8,200 43,610 047,070 1,63,072 13,446 11,381 57,813 1,07,837 8,200 43,610 47,070 1,63,072 1,814 45 11,000 1,35,330 45,013 47,550 33,123 22,86 25,802 83,53 1,00,742 184,445 113,016 1,35,330 45,013 47,550 33,123 22,86 25,802 83,53 1,00,742 184,473 13,444 12,230 1,00,742 184,473 13,444 13,231 10,415 20,83 33,603 2,00,447 12,184 43,231 10,415 20,83 33,603 20,0,471 18,185 31,185 3	1831 29		135,000	1,95,409	73,006						1.09.953	100
101,009 20,001 17,249 27,73 27,450 49,448 67,51 49,98 73,452 1,62,727 1,812 43 1,10,876 2,00,205 67,88 42,030 78,816 2699 48,649 63,372 1,54,033 1,834 44 100,701 1,74,686 11,381 57,843 1,07,837 83,90 43,640 63,670 1,54,033 1,83,173 1,63,072 13,8446 100,701 1,74,686 11,381 57,843 1,07,837 8,200 43,640 47,070 1,63,032 1,83,173 1,63,072 1,83,164 1,63,072 1,63,072 1,83,164 1,63,072			135,000	2,05,904	20 670		41,818	612		20,700	2.11.880	101
1812 43	10:041			2,01,591		27,450		(65			1,32,173	103
1983 44. 100,701 1,74,686 11,381 67,813 1,07,837 8,309 43,619 62,372 1,53,083 12,183 1	1741-12.		13,000	2,03,951	17,299	27,450				73,452		112
Serrey. 100,701 1,73,656 11,331 57,813 1,07,857 8.300 43,610 47,070 1,63,072 15 1814 45 123,250 1,13,715 12,147 57,655 47,807 1007 37,427 29,373 1,10,650 1844-46 119,016 1,85,930 45,013 47,550 35,123 2,256 25,892 9353 1,09,742 12 1847-45 193,370 1,67,248 4 10,317 8197 1828 34,344 1222 1,04,471 12 1818-48 193,370 1,67,248 4 10,317 8197 1828 34,344 1222 1,04,471 12 1818-48 193,370 1,67,248 4 10,317 8197 1828 34,344 1222 1,04,471 12 1818-48 193,1604 1,04,671 1,04,	1012 43		1-0.816	2,00,205	€078							
1841 45		•••	100,101	1,74,686	11,381	57,813	1,07,887	8200	43,010	47,070		
1847-46 119,006 1,25,230 40,013 47,550 37,123 22.6 25,892 8253 1,10,672 1,10,672 1,10,672 1,10,672 1,4075 37,123 22.6 25,892 2233 1,10,672 1,10,672 1,4075 37,123 34,40 2221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 221 1,10,447 220 1,10,447 221 3,169 200,147 11,10,447 232 3,169 200 200,463 133 33,261 49,114 1,10,211 14,177 11,147 232 34,664 200,005 14,177 11,147 232 34,664 200,005 14,177 11,147 11,147 232 34,664 200,005 14,177 11,147 232 13,434 19,114 1,10,211 14,10,211 11,10,211 14,10 14,117 11,142 232 13,667 23,4664				1 1		1	1		ĺ	1		
181-46 119,016 1,35,330 45,013 47,550 35,123 2,56 25,892 85,892 1,09,722 18 1816-47 183,159 1,59,716 401 18,151 4,075 3711 34,446 2225 1,104,447 21 1817-48 193,370 1,07,248 4 10,317 8197 1828 34,344 1929 2,01,477 1818-1819 50 183,565 1,01,722 17 22,229 17,542 2855 31,578 20,006 1818-50 183,565 1,01,722 17 22,229 17,542 2855 31,578 20,006 1818-50 189,046 1,03,451 4 132,21 10,445 2018 35,565 000 2,05,407 14 1819 50 189,046 1,03,451 4 21,780 20,066 312 33,904 49,114 1,70,271 16 183-51 189,046 1,03,451 14,177 11,124 2328 34,904 49,114 1,70,271 16 183-55 201,973 1,77,085 8 1,047 800 22118 33,213 14 21,17,00 11 183-55 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 22118 37,565 201,973 1,77,085 8 1,047 800 2118 87,565 201,973 1,77,085 8 1,047 800 800 22118 37,563 22,27,09 3 1855-55 201,940 1,89,042 7231 610 1117 33,173 2,00 1,02 177 800 1142 407 33,117 2,23,230 2,23,455 1850 60 201,331 1,03,437 410 305 73 33,203 2,23,453 0,23,23 1850 0 22,27,30 1,04,173 1,04,04 80 51 10 40,710 2,24,732 8180 0 223,743 2,00,000 800 1242 41 182 28 40,026 2,33,764 4 1872 2.20,474 1,83,110 224 182 28 40,026 2,33,764 4 1872 2.20,474 1,83,110 224 182 28 40,026 2,33,764 4 1872 2.20,475 2.20,475 1.20,475 2.20,475 1.20,475 2.20,475 2.20,475 1.20,475 2.20	1841 45		123,219	1,13,715	12.147	57,650	47,307	1067	37,427	29.373	1 10 690	184
1847-43	1847-46		119.016	1 .35.330	45.013	47,550	35,123	2256	25,892	9353	1 09 749	128
1818-60	1846-47.		182,050	1.50,310		18,315	14,975	3371		2225		218
1818-60	1847-45		192,370	1,67,248	4	10,317	8197	1828	34,344	1929		
189.05 189.06 1.61.672 17 22.229 17.642 2855 33.678 23 2.00.065 183.051 189.06 1.61.672 4 24.768 29.06 8123 33.201 49.11 1.0.211 161.825 183.651 199.413 1.72.619 11.177 11.124 2389 34.664 268 2.07.213 161.825 1.67.769 11.078 9367 2281 31.213 14 2.11.714 183.554 201.673 1.77.685 8 11.647 8862 2116 37.666 41 2.17.760 2.18.555 201.673 1.77.685 8 11.647 8862 2116 37.665 41 2.17.760 3.0 2.27.631 185.555 201.673 1.85.641 7281 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.631 616 1117 37.693 2.27.732 618.0667 225.637 1.67.637 449 817 82 33.625 2.30.453 2.30.453 418.638			191,866	1.69.451			10,435			630		
1830-531 189,016 1,62,672 4 24,786 20,0-6 3123 33,201 49,114 1.70,211 12 131-52. 1891-52. 1894-54 12 1,72,619 141,177 11,124 2328 34,664 2320 207,213 1852 63 202,450 1,75,761 11,078 9307 2281 33,213 14 2,11,234 1833-54 201,073 1,17,083 8 11,647 8902 2110 37,655 14 2,11,700 7 21,175 1853-55 210,256 1,25,015 30 167 28 11,078 11		***	158,505	1,61,272	17	22,229	17,542					
1832 6.1 202,450 1,75,701 11,124 2328 34,664 268 207,213 1835-54 209,2013 1832 6.1 209,2013 21,11078 9307 2281 33,213 14 21,1124 1833-54 21,1244 2	1850-51		186,016	1.62.672		24,786	20,056	3123	33,301	49.114	1. 0.271	162
1833-54	1851-52	***	193,413	1,72,614				2328		269	2.07.213	123
183-55 201,973 1,77,685 8 11,647 8962 2116 87,646 41 2,17,700 2 1855-56 219,595 329 339 369 37,968 42,17,700 2 1855-56 213,984 1,87,012 2000 1442 447 38,117 2,28,248 0 1857-58 227,700 1,72,177 410 305 73 33,203 2,20,483 0 1859-59 225,637 1,01,638 440 305 73 33,203 2,20,483 0 1859-60 225,637 1,01,638 440 322 69 37,196 2,23,732 9 1859-60 225,237 1,01,638 440 322 69 37,196 2,23,731 439 817 82 33,423 2,30,118 1869-60 233,241 1,03,110 224 152 25 40,026 2,35,011 8164-63 231,743 2,00,050 38 27 5 41,233 2,41,244 2 1864-63 231,743 2,00,652 38 27 5 41,233 2,41,244 2 1866-67 232,463 2,00,600 38 27 5 41,758 2,41,244 2 1866-67 232,463 2,00,600 38 27 5 41,758 2,41,244 2 1866-67 232,463 2,00,600 38 27 5 41,758 2,41,244 2 1866-67 232,463 2,00,600 38 27 5 41,758 2,41,244 2 1866-67 232,463 2,00,600 38 27 5 41,758 2,46,300 2 1866-67 232,463 2,00,760 50 38 7 44,933 2,44,291 2,46,300 2,44,291 2,46,300 2,44,291 2,44,291 2,44,291 .			202,456	1,75,781	•••					14	2.11.214	93
185-55			1201,974	11.77.958	8	11,647				41	2.17.700	76
1836-50 213,051 1,85,141 7231 640 1117 37,693 2,24,551 9 1856 57 210,490 1,89,012 2000 142 447 33,117 2,28,219 0 1857-58 222,700 1,92,177 410 305 73 33,203 2,20,453 0 1859-59 225,875 1,04,868 446 222 69 37,700		} ••• ₁	1210,2)6	1,82,814	20 .				137,493		2.22.101	24
1857-59 222,760 1,02,177 410 305 33,203 220,453 0 1859-50 225,675 1,01,868 416 322 63 7,1700 232,732 0 1850 00 220,331 1,05,437 439 817 82 33,425 2 235,011 8 1800 01 238,215 1,07,168 232 172 20 30,595 2 20,750 4 1801-62 220,447 1,08,110 224 152 20 30,595 2 20,750 4 1801-62 214,010 1,00,404 66 64 40,710 2 40,123 2 218,646 231,743 2.00,000 88 27 6 41,763 242,401 2 218,124 2 22,50,201 2 218,646 221,743 2.00,000 88 27 6 41,763 242,243 2 242,205 2 21,666 222,743 2.00,672 38 27 6 41,768 242,205 2 21,630 21,424,21 88 21,424,21 88 21,445 2 20,0,60 00 40 7 43,600 244,243 8 88 242,205 2 21,424,201 21,445 2 20,0,760 20,0,760 20,0,760 20,0,760 20,0,760 20,0,600 20,000 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,0,600 20,			213,951	1,85,741	***				37,603	***		94
183-59 221,075 1,01,868 410 305 73 33,003 2,30,483 0 1859-50 225,587 1,01,868 446 322 63 37,700 2,32,732 0 1859-50 225,587 1,01,868 446 322 63 37,700 2,32,732 0 1859-50 220,337 1,05,437 439 817 82 33,423 2,33,011 8 1960-61 221,417 1,03,110 222 172 20 33,055 2,23,501 8 1861-62 220,447 1,03,110 2214 152 25 40,026 2,38,761 4 1862-63 221,417 1,03,110 2214 152 25 40,026 2,38,761 4 1862-63 221,417 1,03,110 860 54 10 40,710 2,40,124 2 1864-65 221,437 2,00,652 38 27 6 41,933 2,41,244 2 1864-65 222,437 2,00,652 38 27 6 41,755 24,232 2 1865-60 222,439 2,00,652 38 27 6 41,755 24,237 8 1867-65 222,446 2,00,652 60 40 7 43,653 24,630 2 1867-65 222,446 2,00,750 60 40 7 43,653 24,630 2 1867-65 222,456 2,00,750 61 40 9 44,013 2,45,620 1 1867-65 222,546 2,00,750 61 40 9 44,013 2,45,620 1 1867-67 222,546 2,00,750 61 40 9 44,013 2,45,620 1 1867-67 221,546 2,00,750 132 103 10 43,861 24,4,041 6 1870-71 29 31 232,651 2,00,670 132 103 10 43,861 24,4,041 6 1870-71 29 31 232,651 2,00,670 132 103 10 43,861 24,4,047 6 1871-72 1001 222,650 2,00,7731 130 107 12 40,672 4 240,697 6			211,100	1,89,012						i	2,28,220	96
1850 60 . 20,337 1,05,437 . 499 817 82 93,423 23,5018 8160 60 . 20,337 1,05,437 . 499 817 82 03,505 23,5018 8160 60			222,700	1,02,177]						2,30,453	09
1800 01			225,057	1,91,868							2,82,732	94
1891-62	1000 00		220,333	1,05,437]				38,125		2,33,911	82
1892 63			250,215		•••	232					2,36,789	48
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			227,117	1,03,110	400						2,38,764	48
1864-65 232,343 2,00,672 38 27 6 41,768 2,42,205 1865-60 232,430 2,00,012 37 27 6 45,743 2,42,205 1866-67 212,482 2,00,650 60 40 7 43,030 2,44,227 1867-69 213,446 2,00,495 61 40 9 44,013 2,45,020 11 1869-60 123,046 2,00,746 50 33 7 44,013 2,45,020 11 15-0-70 223,516 2,00,600 132 103 10 43,001 2,44,041 1870-71 20 31 22,0,803 133 103 10 43,001 2,46,037 2 1871-72 120 12 10 10 43,001 2,46,037 2 1870-71 12 10 10 43,001 2,46,037 2 1870-71 13 10 10	****		711.U	1,97,404	•••]							26
1865-66 212,483 2,00,602 37 27 b 45,743 2,46,300 2 2,46,300 1860 77 212,482 2,00,600 60 40 7 43,030 2,44,231 2,44,231 1867 63 212,646 2,00,60 61 40 9 44,913 2,44,931 2,45,020 11 1869-60 22,604 2,00,740 50 38 7 44,977 2,44,031 159-70 1870-71 1871-72 <t< td=""><td></td><td></td><td>W1,443</td><td>2,00,000</td><td>]</td><td></td><td></td><td></td><td>41,23</td><td>***</td><td></td><td>22</td></t<>			W1,443	2,00,000]				41,23	***		22
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1867 65 231,646 200,0 9) 61 40 9 44,913 23,5620 11 1869-65 230,0 42,0 7,746 50 38 7 41,917 2,41,120 0 15-0-70 212,515 2,0,070 132 103 10 43,961 2,44,041 1870 71 20 31 232,515 2,0,802 132 103 10 43,961 2,44,041 1871-72 100 12,2505 2,0,731 130 107 12 40,772 2,47,015			272,439	2,00,012	***						2,46,360	24
18(3-00) 232,004 2,00,740 50 38 7 43,977 2,44,189 0 150-070 172,515 2,00,670 132 103 10 43,071 2,44,041 0 1570 71 29 31 272,651 2,00,602 132 103 11 40,174 2,46,087 1871-72 10 12 22,563 2,00,731 130 107 12 40,272 2,47,015 4			2 12,182	[2,07,050]							2,14,287	84
15-9-70	100/ 05		120,000	2,00,195	***					•••	2,45,620	112
1870 71 29 31 232,851 2,00,803 132 103 11 46,174 2,46,887 1871-72 130 107 12 46,272 2,47,015 4	1013-00			2,00,746						i	2, 14,189	62
1871-72 . [1970] [232,563 [2,00,731]] 130 107 12 40,272 [2,47,015] 4	100/.01	20.21	212,015	2,01,670						1 •	2,44,041	63
			022,051	2,00,603	***					٠ ١	2,46,987	56
- 1312-10-1140-0-1140-0-1112.00.0011 C 130 1 101 12 40.370 1 9.47.988(4				2,00,731								
man and an interest with the second of the second in the second of the s	1312-19.	10 23	204,011	2,00,801	***	130	101	l 12	40,010	l	2,47,388	40

Land.
REVISION SURVEY.
Navalgund,
1874-75.

Dambal, 1874-75.

In 1874-75 the revision survey settlement was introduced into ninety-three Government villages of Old Dambal.¹ Of these eighty-six had been originally settled in 1845-46 and the remaining seven in different years since 1858. At the time of the revision settlement seventy-three of these villages were in Dambal, two in Navalgund, and eighteen in Ron.² In 1874 Old Dambal was bounded on the north by Ron, on the east by the Nizam's country, on the south by the Tungbhadra, on the south-west by Sangli and Miraj, and on the west by Navalgund. The total area was 691 square miles or 442,321 acres. For many years the health of this sub-division had been remarkably good. During the four years ending 1878 the death-rate was 1.97 per cent and the birth-rate 2.80 per cent. In none of the villages had cholera been known from eight to twenty years.

² Colonel Anderson, Survey Commissioner, 129 of 1st February 1875, Gov. Res. 1679 of 19th March 1875, Bom. Gov. Sol. ChiV.

² In 1862, some of the villages to the north and north-west, which were inconveniently distant from the head-quarters of the sub-division, were handed to the neighbouring sub-divisions of Ron and Navalgund. In 1872 the mahalkari's head-quarters at Dambal were moved to the more central, headthier, and more important town of Mundargi. In 1874 the name of the sub-division was changed to Gadag and its head-quarters station was called after its chief town. Mr. E. P. Robertson, Collector, 162 of 27th February 1875, Bom. Gov. Scl. CLIV. 101.

Chapter VIII.
Chapter Land.
La Revision Survey.
The Bi Dambal,
St. 1874-75.

Except in the village of Doni in 1872, cholera was unknown during the eight years ending 1874. During the five years ending 1873 the rainfall at Gadag varied from 8°36 inches in 1869 to 25°25 inches in 1870 and averaged 17°84 inches. In 1874 it was 40°31 inches.

From the backward state of the country in 1844 when it was introduced, the former assessment of Gadag had been very light At that time the 350 miles between the Bor pass near Poons and the southern frontier of the Presidency had only one cart road across the Sahyadris. That one cart road was through the old Ram pass between Belgaum and Vengurla. It was three miles in length and for long stretches had an incline of one in five or six. Carts went up and down by lightening loads and clubbing together the bullocks of two or three carts. Most of what traffic went from Dharwar, was carried on bullock-back along the different tracks down the Sahyadris to Kumta, Ankola, and other smaller ports in North Kanara. At that time at no point south of Poona were both the country below and the country above the Sahyadris in Bombay districts which could have worked together to make a through line between the sea and the inland plains. In the north the states of Satara and Kolhápur separated Poona from Ratnágiri, and further south the coast line was either Portuguese or in Madras. In 1845 a pass to Honávar in North Kánara was improved, and, several years later, the Dovimani pass opened communication with Kumta which had then risen to be the leading roadstead. The opening of the Dovimani pass was the beginning of a time of marked prosperity for Dharwar. The opening of the railway to Belari provided a new market for the eastern Dambal villages. But the distance of about seventy miles to Belári was very difficult with much black soil and many unbridged rivers. Still in 1874 a large cart traffic passed east to Belári. The Hubli-Belári road was the only made-road in the sub-division. It passed through Annigeri, Gadag, and Dambal to the Tungbhadra river. It was good from Annigeri to Gadag, fair from Gadag to Dambal, and bad from Dambal to the Tungbhadra at Hesrur sixty-eight miles west of Belari. The best part of this road was good only in the fine weather. It was bridged but not metalled, and as soon as rain fell 'grew muddy and heavy. From Gadag to Dambal it was neither bridged, metalled, nor cared for, except close to Gadag itself; beyond Dambal it was a very bad country track, in places almost impassable. The country cart tracks were numerous, especially in the northern plain villages. They spread from every village to all the villages round and as a rule were good enough for all purposes. In the black plain they became more or less impassable during the rains, but in the fine weather the plain roads were better for carts than the roads in the villages near

¹ In February 1875 Colonel Anderson the Survey Commissioner wrote: Thirty years ago cholern was provalent in this sub-division. At that time troops were constantly passing between Belari and Dharwar to Kolingur and Savantvádi which were disturbed. They generally brought cholers in their train. Of late years in Dambal, as in other parts of Dharwar, cholera had much decreased, partly because troops no longer marched through the district and partly from the improvement in the water supply. Bom. Gov. Sci. CLIV. 29, 39.

the hills where the dips and rises as well as the stones made the roads In the villages between Sortur, Gadag, and Dambal as well as Chikvadvatti, the cross country roads were bad, in places impassable to carts. In these villages the number of carts was much less than elsewhere. Since 1844 great progress had been made in road making and opening the country to traffic. Hundreds of carts passed with ease in places where they never went before. During the survey lease grain prices had risen considerably. Since 1842 jvári and wheat had risen more than 150 per cent, linseed about 50 per cent, and kardai or safflower and other chief oil seeds more than 200 per cent. During the four years ending 1874 prices had been steady.1 Between 1863 and 1865 the prices of grain and oil-seeds were much more than double the 1874 prices and the price of cotton was more than four times as high. Still there was no reason to suppose the prices would fall to the 1842 level. In February 1875 Colonel Anderson was satisfied that in all exportable articles the Gadag landholders were more than 100 per cent better off than they had been when the former survey rates were fixed. The opening of the country by railways and roads must continue to prevent the gluts of produce from which landholders used formerly to suffer.

In the eighty-six villages settled in 1844-45 the area of occupied Government land during the ten years ending 1845 averaged about 140,000 acres. The year or two before the former survey settlement had showed a marked tendency to a decline in tillage, and, in 1844, the year of the settlement only half of the arable area was held for tillage. From the first year of the settlement a change set in. The occupied area and the revenue together steadily increased year by year, and in 1860-61, two years before the great inflation of prices due to the American War, the occupied and unoccupied area, instead of being equal, were represented by acres 261,338 and 4519, the Government revenue had risen from £9552 (Rs. 95,520) in 1845-46 to £15,653 (Rs. 1,56,530) in 1860, and of this all but £2 (Rs. 20) were collected. From 1860-61 there was little change; in fact there was little room for change. The occupied area in 1873-74 was acres 265,240 and the unoccupied arable area 3654 acres. Since 1847-48, with the exception of the single year of 1856-57, remissions were nominal, and, when they occurred, were confined to the most trifling amounts. Since 1854 there were no outstandings.

Bom. Gov. Scl. CLIV. 14-15. The details are:

Gadag Grain Rupee Prices, 1842-1874.

Year.	Jobei.	Wheat	Linsced.	Safflow er.
1812-1844 1845-1850 1855-1850 1871 1872 1874	52] 7: 44 22	Shere. 401 421 111 12 16 20	Shers. 81 27 29 12 16 18 21	Sherr. 62 671 403 101 17 18 18 18

Chapter VIII.

Land.

Revision Survey.

Dambal,

1874-75.

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The following statement gives the average tillage area and the collections for periods of ten years between 1835 and 1874:

Dambal Tillage and Revenue, 1885 - 1874.

	Gaspen-	Occi Men.		Arapli Wastel			Reuls. #10\s	מטופרוס וטדנ
Yeth.	VIL- Lides,	Govern- ment,	Alienated	Govern- ment.	Govern- ment.	Alien- ated,	Gme	nırıcat
1575-1845 1846-1855 1855-1865 1865-1878 .	85 85 85	Acres, 140,170 187,400 255,002 265,007	Acres, 110,558 110,462 103,9-1 19,436	Acres. 75,727 63,681 7402 3-05	Re. 1,09,500 1,04,9 3 1,52,4-2 1,53,052	Re 23,123 27,242 29,170 34,002	R. 23,250 33,3 34 5	Pa, 19,622 3041

In 1873-74 the sum obtained for the grazing of the arable waste was very low, £16 (Rs. 160) for 4353 acres assessed by the survey at £110 (Rs. 1100). The reason why this land fetched so low a price was that it was scattered in small detached patches near to or mixed with tillage. These small plots were of little use for grazing except to neighbouring landholders. On the other hand the unarable grazing tracts, though of much worse quality, had the advantage of an extensive range of area and consequently gare an average rate nearly double the lowest rate for land recorded as arable.

Except near the sandstone capped hills in the north-cast and in the clay slate Kapat hills of the south-west, where it was a sandy or gravelly red, the soil was the black cotton soil. The sandy formation ran down in a south-easterly direction to the Tungbhadra. The tillage was fair. The best tilled villages lay between Sudi and Kotumachgi, near Gadag south of Hombal, and from near Mundargi to the Tungbhadra. The hill villages, those near the main Dambal-Gadag road and those west of Hombal, were less carefully tilled and had large patches of hariali grass which in a few places half choked the crops. The use of manure was general. In the black plain all the fields near the villages were manured every year; those further off had some manure once in three or four years, and outlying fields, unless without help they refused to yield anything, were never manured. The red soils which wanted much more enriching than the black, received as much manure as the landholder could manage to give them. The staple products were juani, wheat, and cotton. Pulses were grown to some extent and oilsceds were mixed with gmin. The jrari was enten locally and most of the wheat, and cotton and some of the oilseeds were exported. Of the whole outturn about one-third belonged to the early or red soil and two-thirds to the late or black soil.2 Cotton was the great local staple. In 1873-74

¹ In 1875 Mr. Robertson the Collector noticed that the spread in tillage was not due to the American War, as most of the land was taken before the effects of the Amerito the American viar, is most of the lami was taken before the eners of the American viar, is most of the lami was taken before the eners of the American viar work for the special prosperity of the sub-division. The almost entire absence of remissions and outstandings was a further proof of this prosperity. Mr. E. P. Robertson, Collector, 162 of 27th February 1873. Bom. Gov. Sol. CLIV. 116.

2 The 1874 details were early crops judy 227 per cent, bdjril 63, tar 227, mag 2:34, butthi 0:91, mathi 0:33, rdfa 1:88, miscollaneous 5:50, total 57:18; late crops judy 14:21 per cent, cotton 30:34, what 11:65, gram 2:27, busumba er saflower 2:18, linsced 1:90 miscollaneous 0:17, total 62:82. Bom. Gov. Sol. CLIV. 6:7.44.

^{1 99,} miscellaneous 0 17, total 62 82. Bom. Gov. Sel. CLIV. 6-7, 41.

less than 111,219 acres or nearly one-third of the whole tillage area were under cotton. Of the whole area 76,963 acres were American and 34,256 local. At 1874 prices the local value of the cotton crops averaged £1 to £1 2s. (Rs. 10-11) an acre or more than four times the revised survey rates. The chief imports were English piece goods from Bombay both by the coast and by Belári; cocoanuts, betelnuts, cocoanut oil, spices, and salt, from Kánara and the coast; coarse sugar or gul and rice from South Dharwar and Kánara; silk from Belári; and tobacco from Hubli. The leading exports were cotton, oil-seeds, and wheat. Most of the cotton went to Hubli and from Hubli to Kumta or Kárwár on the coast. Of late years a considerable quantity of cotton had taken the eastern route to meet the rail at Belári. Much more would have gone by this route but for the badness of the road between Dambal and the Tungbhadra. The chief industry was the weaving of cotton cloth and of blankets. Much cotton and silk was dyed at Gadag and Betgeri, and cotton was also made into thread and sold in the local markets. Some villages made country carts, earthen vessels, and oil, and in most field tools were made and mended. River bed stones rich in iron, were smelted in Chikvadvatti, Doni, and some of the smaller villages in the Kapat hills. Iron smelting had once been a large industry but cheap English iron and dear local fuel had ruined it between them. After rain the sands of some of the Kapat hill streams were washed for gold but the yield did not do more than repay the labour. Cotton ginning or seed separating was an important industry. The local cotton was separated from the seed by the footroller, the American cotton by the saw-gin. Thirty-eight of the ninety-one inhabited villages had sawgins, 203 in all, worth about A cotton press was worked at Gadag by £4575 (Rs. 45,750). Messrs. P. Chrystal and Company and a second European firm Messrs. Robertson and Company bought and exported cotton.1

In 1874 there was a brisk trade in land. In many cases land was sold at fifteen to twenty times and in some cases at thirty to forty times the survey assessment. These were high prices considering that money was worth about twelve per cent. In the records of sales where a small price was entered, five or six times the assessment, there was always the doubt whether the entries correctly represented the sale value of the land.2 During the thirty years ending 1874 population had increased from 82,842 to 121,482 or 46.6 per cent,3 flat roofed4 houses from 14,717 to 25,266 or 74.4 per cent, farm cattle from 23,194 to 25,473 or 9.8 per cent, carts from 673 to 3998 or 494 per cent, watering wells from 97 to 138 or 42.2 per cent, and drinking wells from 290 to 483 or 66.5 per cent. On the other hand there was a decrease in thatched houses from 750 to 461 or 31.9 per cent; in cows and buffaloes from 41,035 to 29,106 or 29 per cent; in sheep and goats from 49,167 to 24,571 or 50 per cent; in horses from

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> Dambal, 1874-75.

Captain Godfrey, 1874, Bom. Gov. Sel. CLIV. 35-36.
 Bom. Gov. Sel. CLIV. 13, 45-55.
 In fifty-nine Government surveyed villages in 1874 the agricultural population was 25,677 or 55 38 per cent, partly agricultural 6615 or 14-27 per cent, and non-agricultural 14,072 or 30-35 per cent. Bom. Gov. Sel. CLIV. 43.
 Tiled houses were almost unknown. Bom. Gov. Sel. CLIV. 10.

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924 to 684 or 25-9 per cent. The small increase in well irrigation was chiefly due to the brackishness of the water and to the great thickness of the waterless surface layer. Round Gadag water was good, pleasiful, and near the surface; but the people failed to use the waters they were satisfied with the returns given by dry-crops. In 1874 the population gave a density of 175 to the square mile, a fair rate for a country with little watered land. The rate of increase, 46 6 per cent, was considerably greater than in the Hubli and Navalgued villages, perhaps because people had come from the neighboaring Nizam's country. In 1844 and 1845 when Colonel Anderson was carrying out the first measurements, some persons were shown him who had come from the Nizam's villages. The move had to be made with great care as the people were closely watched and the property and families of those who were suspected of inclining to move into British territory were liable to be seized. This immigration ceased in 1852 when the neighbouring Nizam's villages passed to the British.1 It was known that this inflow of people from the Nizém's villages had never been on any very large scale. Mr. Robertson the Collector thought that the increase was solely due to the general prosperity of the sub-division which was shown by the rapid rise of Gadag-Betgeri and Mundargi.2 The flat-roofed or better class of houses had greatly increased, and though there was little rise in the number of farm cattle the style of animal had greatly improved. The landholders took pride in their bullocks, and bad cattle were rarely seen. The bringing of great stretches of waste under the plough had reduced grazing and lowered the number of sheep and goats. Large flocks still found good grazing on the Kapat range. There was no former record of ploughs; 6227 the 1874 number was doubtful; whatever the number, it was enough to keep the land in fair cultivation. As in every other part of the country the number of carts had enormously increased. In 1844 the common two-bullock cart or chhakdi was almost unknown; the large eight-bullock waggon or hali bandi which was only used for home purposes, was the only cart of the country. There was no direct road to the coast and all the coastward trade was carried on pack bullocks.3 One-half of the new wells had been sunk between 1864 and 1874. One reason for the small increase was that over about three-fourths of the area the waterless surface stratum was very thick, and, even when water was reached, it was commonly brackish. The chief supply of water was from ponds and stream-beds. Of 151 ponds all but four were used for drinking. Of the whole number in ordinary years probably not one-tenth held water at the end of the hot weather. To a great extent the people depended on holes dug in river beds. Fortunately early in May a succession of thunderstorms usually furnished a fresh supply. The northern villages especially near Navalgund suffered most from the want of good drinking water.

¹ Colonel Anderson, Bom. Gov. Sel. OLIV. 9-10.

Mr. E. P. Robertson, Collector, 162 of 27th February 1875, Bom. Gov. Sel. Chiv.

^{111.}In February 1875 Mr. Robertson wrote: 'A cart and pair of bullocks is usually calculated to represent a profit to its owner of about £10 (Rs. 100) a year. An increase of 3325 carts, therefore, represented a yearly addition of nearly £35,000 (Rs. 3) likks) to the income of the sub-division.' Bom. Gov. Sel. CLIV. 113.

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The large village of Kotumachgi, with about 2700 people, had only one well. Except what this well yielded, the rest of the water had to be brought several miles. In the south water was plentiful, the streams often held water all the year round. The rainfall varied slightly in different parts of the sub-division. In the extreme north-west villages it was uncertain. Further east, though not more abundant, it was more seasonable. The whole centre of the sub-division had a fair rainfall. Except under the lee of the higher part of the range south of Dambal, the Kapat hill villages had an unusually large share of the early rains. The four reservoirs which were used in watering land were a lake of 465 acres at Dambal and small ponds at Navali, Balganur, and Hulkot. The Dambal lake had once been a large expanse of water even in the hot weather. It still (1874) watered 124 acres of good garden land. But it was much silted. It was dry by the end of March and even when full, was not more than six feet deep. More than half of it was overgrown with a thorny thicket of babhul bushes a favourite resort of pig, peafowl, and other wild animals. After the rains the drying of the decayed undergrowth caused much fever of a deadly type. The traffic between Dambal and Belári was large and growing. The exports to Belári included some cotton, a good deal of wheat, and, in years of short rainfall in Belári and Kadapa, considerable quantities of the common grains. The landholders of Dambal were well off for local markets. The joint town of Gadag-Betgeri with a population of over 18,000 was a place of large trade. Gadag was the chief local cotton centre and one of the leading trading towns in the Bombay Karnátak; Mundargi was a large market with a rapidly growing trade; Dambal and Naregal were good minor markets; and there were several more well placed village markets. Gadag-Betgeri had long been one of the leading weaving centres. In spite of the competition of English and Bombay steam-made yarn and cloth, the weavers had nearly held their own, the number of looms showing a fall only from 1507 to 1399.

The ninety-one inhabited villages had 806 temples, 133 mosques, 103 gardi-manis or sport-pits, and 17 distilleries. The small number of distilleries and the large number of sport-pits said much for the temperance and the manliness of the people. The sport-pits were for coolness built partly underground, where the young villagers wrestled, worked dumbbells, lifted and threw weights sometimes with great skill and success. The elders looked on with interest. To have the best wrestler in the country-side was an honour of which his village was extremely proud.²

In 1874 about 75 per cent of the Government lands were tilled by the man whose name appeared as holder in the Government books or by members of his family. The holders tilled about five per cent in partnership with others and let twenty per cent to tenants.

Captain Godfrey, 1874, Bom. Gov. Sel. CLIV. 37.
 Captain Godfrey, 1874, Bom. Gov. Sel. CLIV. 39.

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St. Dambal,
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of surface water over a great part of the sub-division, which made well watered gardens impossible. The proposed revised rates raised the rental on the area under tillage from £16,757 to £24,845 (Rs. 1,67,570-Rs. 2,48,450), an increase of 48.2 per cent. The details are:

DISTRICTS.

Dambal Revision Settlement, 1874-75.

Ī		1	FORMER	Striet.			P	Pointa	Buri et.			
l	CLASS.	vii-		pled.	Occi	apled.	Uno	cupled.	To	tel	ln-	High
	GRA77,	lages	Area.	Colleg- tions.	Area.	Rental,	Area.	Rental.	Ares.	Rental.		Acro Rates
	1. 11 11	17 33 20 14	Acres. 60,778 94,026 100,741 26,443	Rs. 34,153 53,789 61,552 10,012	Acres. 51,428 02,31J 103,201 25,868	R4. 62,830 66,615 00,837 19,163	Acres. 204 1414 2110 1918	Ha. 64 460 624 383	Acres. 61,632 93,727 110,822 25,786	Ra. 62,410 87,001 90,651 19,581	55-1 46 7 19-6	Es. 11
}	Total .	93	279,999	1,67,560	278,813	249,449	6658	1427	251,467	249,673	452	·

Compared with the first three classes, the increase in the fourth class was very small, only 196 per cent; the villages in this class were outlying and badly placed and much of the soil was poor. The largest increases were in Chikop, a good black soil village close to the north of Gadag, and in Hombal and Gadag town. Hombal was an exceedingly well placed purely black soil village and in Gadag the whole of the lands to the north of the town were black soil. In four villages the increase was between sixty and seventy per cent. In all the remaining villages it was less than sixty per cent. Three villages showed a decrease, Kalignur of 6.2 per cent, Bevinkatti of 0.7 per cent, and Dindur of 3.6 per cent. Of these Kalignur and Bevinkatti were in the extreme north-east where was much poor soil, and Dindur was among the Kapat hills where the soil was very poor. The following statement shows the total area and assessment of the sub-division under the original and the revised survey settlements:

Dambal Survey Settlement, 1874-75.

Tanb	Exu	1340,	Prorosed				
in the state of th	Ares.	Rental	Area.	Rental.	Quit Rent		
Govern Gocupied	Acres. 279,058 435. 101,250 64,170	Rs. 167,668 1174 66,270 	Acres. 278 812 6055 109,062 48,792	93,105	31,363		

The decrease in the unarable area from 54,170 to 48,792 acres was chiefly due to the transfer to the arable of the lands in the villages on the slopes of the Kapat hills. The average acre rate all over the occupied land amounted to 1s. $9\frac{2}{3}d$. $(9\frac{7}{12}as.)$ under the former settlement. The proposed revised settlement was sanctioned by Government in March 1875.

¹ Bom. Gov. Res. 1679 of 19th March 1875, Bom. Gov. Sel. CLIV, 142-145.

During the ten years before the original survey settlement (1835-1845), the tillage area varied from about 113,700 acres in 1835-36 to about 148,600 acres in 1840-41, and collections from about £9500 (Rs. 95,000) in 1841-42 to about £14,500 (Rs. 1,45,000) in 1839-40. During the first ten years of the survey lease (1845-55) tillage rose from about 151,000 acres in 1845-46 to about 206,000 acres in 1854-55 and collections from £7086 to about £15,300 (Rs. 70,860 - Rs. 1,53,000); during the next ten years (1855-1865) tillage rose from about 222,300 acres in 1855-56 to about 266,800 acres in 1864-65, and collections from about £16,100 to about £19,200 (Rs. 1,61,000-Rs. 1,92,000); and during the last ten years (1865-1875) tillage fell from about 266,600 acres in 1865-66 to about 265,200 acres in 1874-75 and collections varied from about £19,100 (Rs. 1,91,000) in 1871-72 to about £19,400 (Rs. 1,94,000) in 1874-75. The details are:1

	3	CILLAGE.			WAST	E.	014	Out		Jedr
YE AR.	Arca.	Rental	Remis sions.	Area.	Ren- tal.	Grazing Fees.	Quit- Rent.	etand- ings.	Collec- tions.	Ruped
Before				_						
Surocy.	Acres.	Ra.	Rs.	Acres,	Rs.	Rs.	Rs.	Rs.	Rs.	Pound
1835-30	113,680	1,11,080	19,148	PI,477	83,484	176	18,473	6563	1,04,918	.,
1836-37 187-33	127,767	1,23,678	8147	76,746	60,106	133	21,543	24,238	1,12,569 1,07,663	1
1000 B/1	143,943	1,37,258	6675	61,725	58,552	182	23,851	46,403	1,07,663	
1839-40	140,412	1,46,008	20,002	05,406	50,261	53 249	22,703 23,418	22,020 11,218	1,22,142	
1810-11	143 579	1,86,774 1,37,542	42.263	70,003	71 957	240	23,983	16,893	1,02,609	
1841-42	147.561	1,35,521	36.581	71.77	70.438	384	24,004	28,913	93,815	•
1612-41	144,490	1,35,521 1,34,331	32,616	78,719	81,259	987	25,002	17,891	1,09,813	
1843-44	144,400	1,33,230	31,715	80,010	87,459	705	21,842	17,065	1,08.897	
1844-45	137,472	1,29,077	25,417	87,020	94,611	109	24,390	4221	1,23,944	
Surrey.	- 1				1		İ	ĺ	-	
1845-46 .	161,281	95,516	33,009	86,930	45,309	2577	18,035	13,159	70.860	14
1840 47	172 • 20	1,07,637	412	72,122	37,000	8523	21,556	12	1,87,262	120
1847-45	174,010			70,931		7775	21,543	32	1,87,663	120
1819 49	181,600		16	61,611	32,147	6936	21,405	17	1,41,076 1,3°,891	120
1850-51	170,671	1,03,467 1,09,554	16	68,209	30,673	6146	21,203 20,742	23,055	1,12,810	120 120
1851-62	110,217	1,16,310		67,310		50S1 5185	20,075	20,000	1,42,127	140
11:52-63	11-0,6 '2 197,660	1,20,623	105	60,216	23,954	4638	20,704	ĭ	1,45,761	98
18 3 61	100,781	1.19.871	25	62,067	27.613	4901	25,470	122	1,50,104	99
1854-55	203,021	1,21,677 1,32,193	76	45,648	21.046	4008	24 004	_	1,53,294	82
1855-66	222,257			30,222			25 ,224		1,61,029	80
1860 57	210,496	1,17,416		11,017	5572	1013	20,144	• • •	1,74,978	80
1817-58 1859-69	263,611	1,51,488 1,63,301	16	4620 6012	1110	612	25,727 25,487	٠ ١	1,77,812 1,79,201	92 84
1650 60	254,009 259,721	1,55,186	16 16	6102	1755 1502	425 390	25,107	•••	1,80,678	76
1800-61	261,338	1,60,630,	îš	4510	1177	340	27,027	- 1	1,83,891	62
1801-02	243,013	1,67,560	16	4181	1058	860	32,310	- 1	1,90,214	59
1662-G4	261,69	1,68,011	14	4021	885	330	32,091]	1,00,401	36
160 :- 04 .	200,529	1,58,516	14	2221	496	205	32,772	٠. ا	1,91,510	24
1804 05	260,809	1,69,780	••• }	2185	480	181	33,823	٠ ١	1,02,784	24
1845-06	200,620	1,64,023		309J	598 1422	210	81,040 89,811	•	1,92,903 1,91,880	19 22
1607-07	201,004	1,57,729	•••	37-8	1181	310 312	34,306	:::	1,92,608	72
	201,000	1,67,541		4260	1305	303	31,141	: I	1,02,845	80
1859 70	264,715			4132	1000	800	31.232		1,92,717	04
1870-71	261,647			3063	901	1000	31,232 33,729		1,03,820	50
1871-72		1,68,101	14	4021	1018	145	82,785		1,01,020	56
1872-78	201,811	1,69,103	14	4010	1017	203	82,791	• 1	1,01,140	40
1-7:74		1,69,203	14	3651	025	103	83,018		1,91,809	52
1674-76	205,230	1,68,160		6351	877	2531	83,051	***	1,01,851	***
Resiston Survey.			ļ		ł	- (-	{	
	000 000	2,32,729	- 1	4170	D18	1074	80,029		2,71,332	
1875 76	203,309	2,32,727	801	4117	956	1003	86,012	14,807	2,66,684	:
1476 77	201,200 200,730	2,31,550		8310	1005	817	87,000	4501	2,67,878	.:
1677-78 1878 79	209,867	2,31,200		0801	2374	000	80,749	4025	2,07,014	,
								622	2,69,000	

¹ Bom. Cov. Sci. CLIV. 56, 60 · 61.

Chapter VIII. Land.

REVISION SURVEY. Dambal. 1874-75.

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Banlapur,
1876-77.

Bankapur, which had been settled in 1846-47, was resettled in After the first survey, a redistribution had taken place, by which eighty villages remained in the Bankapur sub-division, fifty-two had been transferred to Karajgi, four to Hangal, and one to Hubli. Old Bankápur was much broken by villages belonging to the Savanur state and to other sub-divisions. From the extreme west to the extreme east was about forty miles. During the thirty years ending 1875-76 communications had been greatly improved. A cart road had been opened between Hubli and Sirsi and another joining Bankapur with Sirsi and passing near Hangal. Roads had also been made leading by the Arbail pass to Karwer and Kumta. A line ran between Haveri and Sirsi by Samasgi which opened communication with Kumta. A road from Haveri to Havanur joined Bankapar with Belari. The rupes price of jran had risen from 262 pounds in 1844 to 86 pounds in 1874, of wheat from 100 to 28 pounds, of gram from 82 to 28 pounds, and of rice from 86 to 42 pounds. Cotton had risen from £7 10s. (Rs. 75) the khandi of 784 pounds in 1846 to about £16 (Rs. 160) the khandi in 1876.

Comparing the nine years ending 1855 with the eight years ending 1874, the area held for tillage had risen from 189,690 acres to 223,304 acres and the collections from £8614 to £10,857 (Rs. 86,140-Rs. 1,08,570). The details are:

Bankapur Tillage and Recenue, 1835 - 1874.

Year.	Occupied Land.	Arabic Waste	Collec- tions.	Remis- sions,	Out- standings.
1836 - 1845 1846 - 1855 1856 - 1875 1868 - 1874	Acres 166,158 189,690 221,632 223,804	Acres. 55,209 35,020 3064 1943	Rs. 86,949 86,143 1,06,043 1,06,573	14,915 687 1	Rs 7107 4257

The average notices issued in default of timely payment of revenue from 1872-73 to 1874-75 were 162. During the same period land had only twice been sold. In 1875 about seventy-five per cent of the Government lands were tilled by the men whose names appeared as holders in the Government books, either solely or in partnership with others. The holders sublet about fourteen per cent on money rents and four per cent on produce or grain rents. Three per cent were arable assessed waste, a proportion of which consisted of valuable grass lands which were not allowed to be taken for tillage but were yearly sold by auction. Three per cent was unarable unassessed waste. In eighty-eight villages of the sub-division there was not a single waste survey field. What waste there was was generally in the villages to the west, bordering on the forest, where grazing was abundant and in the eastern villages where there was much poor hilly land. The returns showed a rise in population from

¹Col. Anderson, Surv. Comr. 7 of 4th Jan. 1876, Gov. Res. 1031 of 16th Feb. 1876. Bom, Gov. Sel. CLV.

67,722 in 1846-47 to 88,869 in 1875 or thirty-one per cent; in flat roofed and tiled houses from 10,481 to 14,908 or forty-two per cent: in carts from 1641 to 4115 or 150 per cent; and in horses and ponies from 912 to 939 or three per cent. On the other hand thatched houses had fallen from 2854 to 2089 or twenty-seven per cent; farm cattle from 21,877 to 21,624 or one per cent; cows, buffaloes, and their young from 38,400 to 34,740 or nine per cent; and sheep and goats from 18,064 to 12,976 or thirty-four per cent. The number of looms had risen from 395 in 1845 to 867 in 1875. The soil and climate varied greatly. In the west red clay slate soils were common like The centre of the sub-division was black soil the Hubli red soils. with occasional hills and patches of red. In the east were outcrops of granite or rather of gneiss. The black soils were of a superior quality and were excellently suited for the growth of cotton, especially of In the west the rainfall was rather heavy for New Orleans cotton. superior dry-crop tillage. The centre of the sub-division, passing from west to east, enjoyed an excellent and certain rainfall, and was well suited for the growth of dry crops. In the north and south belt of villages, the rainfall was somewhat less certain and seasonable, as the villages, especially the eastern villages, got more of the later heavy rains and less of the early June rains. Rice was grown in the western and to a less extent in the centre villages. Jvári, bájri, wheat, tur and other pulses, and oil-seeds as well as cotton were abundant in the centre and east, especially in the central tract stretching from the extreme southerly point, south of the Varda, through a line passing near the town of Savanur, to the extreme northern villages of the sub-division. Cotton was the great exportable produce and as the soil and the damp air were specially favourable to it, New Orleans had to a great extent supplanted the local variety. 123 ponds and reservoirs were used for watering land, but none of them held water during the hot weather. The garden products were cocoa and betel palms, sugarcane, and the betel vine. Rice was also grown as a change crop in garden land. The chief industries were the weaving of coarse cotton cloth and blankets. Karajgi, Nave Riti, and Bankápur had the largest hand-loom weaving population. Háveri was a great centre of the cardamom trade, as cardamoms were supposed to have no value until they were soaked in the water of a well at Háveri. The other trading towns were Bankápur. Karajgi, and Hulgur. The people were well fed, well housed, and well clad, and generally strong and healthy. Their field tools and cattle were good. Tillage was careful especially in gardens and in the fields of Ingalgi and its neighbouring villages.

All fields both dry and watered had to be remeasured. The number of survey fields in the 137 villages of the sub-division was raised from 11,685 to 17,396. The total area was 259,776 acres against 258,988 acres according to the old survey. Of rice there was a total area of 6680 acres against 6160 recorded by the old survey. Of this 3105 acres were Government land against 2655 according to the last survey. The garden area was returned at 1516 acres of which 965 were Government against 1458 acres and 866 Government according to the former survey. A highest dry-crop acre rate of

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3s. (Rs. 1½) was adopted for four isolated villages among the Hángal villages; 4s. (Rs. 2) for fifty villages of which sixteen were on the western border of the main block of the sub-division and thirty-four were to the east of the third class of villages; 4s. 6d. (Rs. 2½) for fifty-two villages lying to the west of the sub-division; 3s. 3d. (Rs. 1½) for twenty-five villages lying to the east of the thirty-four villages of the second class; and 2s. 9d. (Rs. 1½) for six villages in the extreme east of the sub-division. The highest rice acre rate was fixed at 16s. (Rs. 8), and the highest garden acre rate at £1 4s. (Rs. 12). The average acre rate over the whole Government occupied land of every kind according to the revised settlement was 2s. 4¼d. (Re. 1 as. 2½) or 9¾d. (6¼ as.) higher than 1s. 6¼d (127π as.), the existing average rate. The effect of the revised settlement was an increase of 49.5 per cent. The following statement gives the details:

Bankapur Revision Settlement, 1876-77.

		Former	Survey.		Revision Survey.								
C1458.	Vil- lages.		d Land.	Occupied Land.		Arable Waste.		Total.		Increase of	Dry-		
		Area.	Assers. ment.	Area.	Assess- ment.	Area.	Assess- ment,	Ares.	Assess- ment	Assess- ment, Per cent	Acre Rate,		
		Астез.	Rs.	Acres.	Rs.	Acres.	Ra.	Acres.	Re.		Ra. s.		
II	4 50 52 25 6	8142 48,164 44,019 30,365 7081	3437 36,291 47,076 16,293 3954		4951 54,478 74,991 22,134 4848	528 2747	393 1250 302 687	3721 52,902 45,501 84,188 7185	75,299	50 1 56 3 35 8	1 8 2 0 2 4 1 10 1 6		
Total.	187	182,771	1,07,051	1,87,833	1,61,402	6256	2638	148,559	1,64,040	49.5	•••		

There were no cases of excessive increase on whole villages. In three villages only did the enhancement exceed eighty per cent. These as well as half of the villages in which the enhancement was between seventy and eighty per cent, were villages of the third class with a highest dry-crop acre rate of 4s. 6d. (Rs. 21). In other cases large enhancements were mostly due to increase in the area of rice or garden land.

During the ten years before the original survey settlement (1836-46), the tillage area fell from about 73,000 acres in 1836-37 to about 54,000 acres in 1845-46, and collections varied from about £7800 in 1836-87 to about £14,100 in 1839-40 (Rs. 78,000-Rs. 1,41,000). During the first ten years of the survey lease (1846-56), the tillage area rose from about 78,000 acres in 1846-47 to about 114,000 acres in 1855-56, and collections from about £9900 to about £14,800 (Rs. 99,000-Rs. 1,49,000); during the next ten years (1856-66) the tillage area rose from about 124,000 acres in 1856-57 to about 135,000 acres in 1865-66 and collections from about £15,000 to about £16,000 (Rs. 1,50,000-Rs. 160,000); and during the last ten years (1866-76), the tillage area fell from about 134,800 acres in 1866-67 to about 132,800 in 1875-76 and collections from about £16,000 to about £15,800 (Rs. 1,60,000-Rs. 1,58,000). During the four years

after the revision survey (1876-80) the tillage area varied from about 137,000 acres in 1877-78 to about 131,000 acres in 1879-80, and collections from about £21,800 (Rs. 2,18,000) in 1878-79 to about £21,100 (Rs. 2,11,000) in 1876-77. The details are:

Bankapur, 137 Villages: Survey Results, 1836-1880.

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REVISION SURVEY.
Bankápur,
1876-77.

Rental Rental Rental Rental Grazing Fees Standard Rental Grazing Rental			Tillage.			WARTE.			Out-		Jian
1836 37 72,824 1,03,508 46,477 45 918 22,586 218 38,944 17,912 78,841 1837-83 73,605 1,18,804 91,805 45,039 22,070 152 45,704 32,038 1,06,407 1838-39 60,481 1,06,602 34,909 52,167 29,421 274 32,037 701 1,07,103 1839-40 69,784 1,04,415 6740 51,877 27,483 329 43,963 1048 1,40,409 1840-41 70,107 1,04,349 11,262 50,405 27,281 390 45,282 1166 1,85,026 244 1842-42 68,342 1,01,209 9323 65,638 32,800 1205 42,091 3762 1,131,480 1482-44 60,203 93,250 3206 60,402 42,711 73 42,528 46,071 22,15,161 2484-44 60,203 93,250 3206 60,402 42,711 73 42,528 46,071 22,15,161 2484-44 60,203 93,250 3206 60,402 42,711 73 42,528 4632 12,16,102 20 1844-44 60,203 93,250 3206 60,402 42,711 73 42,528 4632 12,16,102 20 1844-44 60,203 93,250 3206 60,402 42,711 73 42,528 4632 12,16,102 20 1844-45 64,077 85,671 3095 69,099 60,764 3461 41,114 790 1,25,701 20 1848-46 64,077 85,671 3095 69,099 60,764 3461 41,114 790 1,25,701 20 1848-49 67,311 85,538 102 42,144 29,978 7765 37,632 43 1,22,939 240 1489-49 87,311 85,538 102 42,144 29,978 7765 37,632 43 1,22,939 240 1489-49 87,311 85,538 102 42,144 21,489 7229 37,099 1,24,839	YEAR	Area	Rental.	mis-	Area.	Rental.	Grazing Fees.		stand-		Rupes Prices.
1837-88	Before Survey.	Acres.	Rs.	Rs.	Acres,	Rs.	Rs.	Rs.	Rs	Rs	₹bs.
1838-39	1836 37	72,824	1,03,508	46,417	45 818	22,586		33,944	17.912	78,841	١.
1839-40	1000 00	78,69	1.18.894	21.865	45,039	22.070		43,764	82.038	[1,08,407	i
1840-41		60,481	1,09,502	34,909	52,157	29,421		32,937	701	1,07,103	1
1841-42 68,591 1.03,920 10,555 52,272 27,501 459 43,070 6920 1,29,181 944 1843-44 60,324 1,01,202 6932 55,633 2,2800 1205 42,001 3762 1,31,480 244 1843-44 60,205 93,520 3200 62,402 42,471 73 42,528 4652 1,25,5 3 224 1845-46 64,077 85,671 3605 69,999 60,764 40 41,847 2073 1,27,620 262 1845-46 64,077 85,671 3605 69,999 60,764 40 41,847 2073 1,27,670 262 1845-46 64,077 85,671 3605 69,999 60,764 40 41,847 2073 1,27,670 262 1847-48 82,314 79,644 126 46,611 24,527 5600 37,642 31 1,22,899 240 1847-48 82,314 79,644 126 46,611 24,527 5600 37,642 31 1,22,890 240 1848-49 87,311 85,533 102 42,144 20,975 6760 37,642 31 1,22,890 240 1848-49 87,311 85,533 102 42,144 20,975 6760 37,642 31 1,22,890 240 1848-49 87,311 85,533 102 42,144 20,975 6760 37,642 31 1,22,890 240 1850-61 91,943 84,823 10 89,503 20,916 5534 80,898 29,181 89,844 21 81551-62 100,510 89,460 14 81,500 16,863 5186 80,898 1,31,020 20 1852-33 101,644 89,848 10 30,800 16,853 5186 80,898 1,31,020 20 1854-55 107,744 92,710 48 25,620 14,440 5618 42,671 47,144,99 80,895 19 19,004 11,464 8960 42,623 77,140,053 94 1855-56 114,429 80,895 19 19,004 11,464 8960 42,233 77,140,053 94 1857-55 121,467 102,355 19 190,04 11,464 8960 42,237 71,40,053 94 1857-55 127,478 104,482 6019 8333 1864 42,673 47,147,144 72 1858-60 122,947 105,497 4723 2527 1403 42,709 1,44,985 80 1858-60 122,947 105,497 4723 2527 1403 42,709 1,44,985 80 1859-60 122,947 105,497 4723 2527 1403 42,709 1,44,985 80 1859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 1859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 1859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 1859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 1859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 11859-60 123,947 100,033 1107 529 2118 49,075 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,375 1,69,3	TO 40 45	70.70		6740		27,483	329	48,953		1,40,709	644
1942-43	30/1 /0	68.80	1 1,02,010	10 695	69 979	97 501		49,202		1.29.314	244
1843-44 60,208 93,850 3206 62,402 42,471 73 42,522 4652 1,25,6 5 224 1844-45 66,601 83,603 830 66,93 47,104 46 41,414 790 1,25,761 26 1848-46 64,077 85,671 3635 69,999 60,764 3461 41,114 790 1,25,761 26 1848-49 87,311 85,681 124 46,611 24,627 5600 37,542 31 1,25,820 240 1848-49 87,311 85,683 102 42,144 29,78 1,763 23 11,25,820 240 1848-49 87,311 85,683 102 42,144 29,78 1,763 23 11,25,820 240 1848-49 87,311 85,683 102 42,144 29,78 1,763 23 37,620 18,202 98,91 244 1850-61 91,943 84,823 10 89,603 29,91 17,25,820 240 1850-61 91,943 84,823 10 89,603 29,91 1850-62 100,610 89,460 14 31,690 16,863 5186 80,989 1,28,823 10,895 1851-62 100,610 89,460 14 31,690 16,863 5186 80,989 1,83,840 21 81850-63 107,744 92,710 48 92,760 18,545 5212 36,183 11,1920 202 1854-55 107,744 92,710 48 92,540 14,850 5125 42,333 77,040 1835-56 114,429 90,385 19 19,004 11,464 8990 42,247 72 1,44,053 96 1856-56 124,147 102,255 19 19,004 11,464 8990 42,247 72 1,44,053 96 1856-56 124,147 102,255 19 19,004 11,464 8990 42,247 72 1,44,053 96 1856-56 127,493 104,482 6010 3433 1364 42,553 144,144 1361 14,499 90,385 19 19,004 11,464 8990 42,247 72 1,44,053 96 1856-60 122,971 104,777 6003 3210 1403 42,790 1,44,995 90 1858-60 122,971 104,777 6003 3210 1403 42,790 1,44,995 90 1858-60 123,971 105,497 4723 2572 1403 42,790 1,44,995 90 1858-60 123,971 105,497 4723 2572 1403 42,990 1,44,995 90 1858-60 123,971 105,497 4723 2572 1403 42,990 1,44,995 90 1858-60 123,971 100,977 4723 2572 1403 42,990 1,44,995 90 1858-60 123,971 100,973 183,973 100,973 11,973 10	1942-48	66.343	2 1.01.269	9323	65,638					1.31.480	244
1848-46		60.20	1 03.850	3206	02,402	42,471	73	42,528	4652	1,28,5 3	224
Survey. 1846-47	104F 40	· 56,69	1 85,630	836		47.164		41.847	2073	1,27,620	262
1840-47 78,338 78,335 (558 50,571 27,877 2883 37,620 18,222 98,611 1247-48 82,314 79,614 126 46,611 24,627 5080 37,542 31 1,22,939 240 1848-49 87,311 83,538 1024 42,144 20,978 77,095 37,632 43 1,22,939 240 1818-50 89,203 84,637 10 41,844 21,489 7229 37,089 29,181 99,844 21851-62 100,610 89,463 10 89,603 20,901 5534 80,803 29,181 99,844 21851-62 100,610 89,464 14 31,609 16,855 5186 50,898 1,131,020 202 1852-23 100,610 89,460 14 31,600 16,854 5212 58,183 1,13,239 46 1853-64 103,995 89,460 22,626 17,449 5618 42,611 47,127,009 41854-55 107,744 92,716 48 25,420 14,830 5186 5212 58,183 1,13,239 46 1854-55 107,744 92,716 48 25,420 14,830 5125 42,333 72 1,40,053 96 1854-55 107,744 92,716 48 25,420 14,830 5125 42,333 72 1,40,053 96 1854-55 124,167 102,355 1 9239 5525 1260 42,247 1,47,137,708 96 1854-55 124,167 102,355 1 9239 5525 1260 42,247 1,47,141 42 1858 69 127,7570 104,757 6005 3216 1403 42,601 14,41,412 42,800 104,825 6015 3833 1384 42,653 1,46,499 90 1859-60 128,947 105,497 4722 2572 1403 42,709 1,48,950 1850-60 128,757 104,977 6005 3216 1403 42,709 1,48,950 1850-60 128,947 105,497 4723 2572 1403 42,709 1,48,950 1850-60 128,947 105,497 4723 2572 1403 42,709 1,48,950 1850-60 128,762 100,033 1107 629 2118 49,843 169,430 46 1861-62 134,600 100,033 1107 629 2118 49,843 169,430 46 1861-62 134,600 100,033 1107 629 2118 49,675 1,60,079 188-465 134,600 100,033 1107 629 2118 49,675 1,60,079 1860-67 134,827 100,178 1168 488 1790 49,871 160,079 187-77 126,600 17,718 1860-69 134,620 100,033 1107 629 2118 49,675 1,60,079 187-77 128,778 100,178 1165 482 1906 49,871 160,079 187-77 126,600 100,033 1107 629 2118 49,843 169,490 100,033 1107 629 218 49,847 1,60,090 1,60,079 187-77 126,600 100,033 1107 629 218 49,847 1,60,090 1,60,079 187-77 126,600 100,033 1107 629 218 49,847 1,60,090 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079 1,60,079	1845-40	• 54,07	7 85,671	3095	69,099	50,754	3461	41,114	790	1,25,761	250
1847-48	Survey.	-									
1847-48		78,33	8 78,836	6536	50,571	27.877		37,620	18,202	98,911	244
1849-49 \$51,311 \$8,5281 102 \$42,144 \$20,978 \$77,695 \$77,692 \$43 \$1,28,320 \$22 \$1850-61 \$10,618 \$84,823 \$10 \$9,503 \$20,901 \$534 \$30,898 \$29,181 \$83,834 \$218 \$1851-52 \$100,510 \$84,823 \$10 \$9,503 \$20,901 \$534 \$30,898 \$29,181 \$83,834 \$218 \$1851-52 \$100,510 \$84,823 \$10 \$9,503 \$20,901 \$534 \$30,898 \$29,181 \$83,834 \$218 \$1851-52 \$100,510 \$84,823 \$10 \$9,503 \$20,901 \$534 \$30,898 \$21,13,020 \$20,801 \$1853-54 \$100,618 \$9,848 \$10 \$30,890 \$16,854 \$5212 \$86,183 \$17,7703 \$96 \$1853-54 \$107,744 \$92,710 \$48 \$25,420 \$14,890 \$6125 \$42,631 \$47,137,703 \$96 \$1836-55 \$107,744 \$92,710 \$48 \$25,420 \$14,890 \$6125 \$42,332 \$72 \$14,053 \$96 \$1836-55 \$114,429 \$90,895 \$19 \$19,004 \$11,404 \$890 \$42,247 \$1,44,618 \$43 \$1876-57 \$ \$124,167 \$102,285 \$1 \$929 \$5525 \$2166 \$42,631 \$47,144,744 \$71,87,740 \$1876-55 \$127,493 \$104,482 \$6019 \$3433 \$1384 \$42,553 \$1,44,999 \$91 \$1858-69 \$127,493 \$104,482 \$6019 \$3433 \$1384 \$42,553 \$1,44,999 \$91 \$1859-60 \$128,947 \$105,497 \$ \$4723 \$2572 \$1403 \$42,905 \$1,48,999 \$1869-60 \$128,947 \$105,497 \$ \$4723 \$2572 \$1403 \$42,905 \$1,49,895 \$06 \$1861-92 \$133,290 \$108,831 \$200 \$108,831 \$1164 \$979 \$45,046 \$1,53,436 \$86 \$1861-92 \$133,290 \$108,831 \$200 \$108,831 \$1202 \$632 \$2058 \$49,843 \$ \$159,436 \$48 \$1861-92 \$133,400 \$100,983 \$1202 \$2572 \$1403 \$42,905 \$1,49,995 \$06 \$184,620 \$109,833 \$1202 \$2582 \$49,843 \$ \$159,436 \$48 \$1861-92 \$138,600 \$100,983 \$1202 \$2582 \$2058 \$49,854 \$1,60,005 \$184,620 \$100,983 \$1202 \$2582 \$2058 \$49,854 \$1,60,005 \$184,620 \$100,983 \$1202 \$2582 \$2058 \$49,854 \$1,60,005 \$1864-60 \$134,620 \$100,008 \$1107 \$629 \$2118 \$49,075 \$1,60,677 \$1,60,677 \$186,967 \$0,960 \$134,620 \$100,008 \$1107 \$292 \$2118 \$49,075 \$1,60,975 \$1,60,977 \$1,60,	1847-48	82,31	4 79.614	126	46,611	24,527		37.642	31	1,22,989	240
1850-51 91,943 84,923 10 39,603 20,901 63534 80,808 29,181 93,844 218 1851-52 100,510 89,846 14 31,509 16,856 5186 80,398 1,31,920 202 1852-33 101,644 89,848 10 30,830 16,854 5212 83,183 1,31,920 202 1852-53 107,744 92,710 48 25,420 14,830 5125 42,333 72 1,40,053 96 1854-55 107,744 92,710 48 25,420 14,830 5125 42,333 72 1,40,053 96 1854-55 114,429 90,395 19 19,004 11,404 3990 42,247 1,44,1053 96 1855-55 127,493 104,482 6019 3433 1854 42,553 1,45,499 30 1858-56 127,493 104,482 6019 3433 1854 42,553 1,45,499 30 1859-60 127,570 104,757 6005 3216 1403 42,505 1,45,999 30 1859-60 128,947 105,497 4722 2572 1403 42,505 1,45,999 30 1859-60 128,947 105,497 4722 2572 1403 42,505 1,45,999 30 1859-60 128,947 105,497 4722 2572 1403 42,505 1,45,999 30 1859-60 128,947 105,497 4722 2572 1403 42,505 1,45,999 30 1859-60 128,947 105,497 4722 2572 1403 42,505 1,45,999 30 1859-60 133,220 108,631 2601 902 902 902 49,843 159,436 46 1861-62 133,220 108,631 2601 902 902 49,843 159,436 46 1861-62 134,600 109,083 1107 529 2113 49,675 1,60,095 14 184-455 134,600 109,083 1107 529 2118 49,675 1,60,095 14 1804 67 148,621 109,007 1204 534 1481 49,507 1,60,095 14 1804 67 134,621 109,003 1108 482 1700 49,507 1,60,095 14 1804 67 134,621 109,003 1108 482 1700 49,507 1,60,095 14 1804 67 134,621 109,003 1108 482 1700 49,507 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,003 1108 848 1700 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 67 134,621 109,007 1204 534 1481 49,501 1,60,095 14 1804 69 13		87.31	1 83.538	102	42,144	20,978		37.632	43	1,28,820	
1851-52 100,610 89,469 10 30,800 16,863 6186 80,398 1,31,020 202 1852-53 101,644 89,848 10 30,800 16,854 5212 89,188 1,18,239 46 1857-64 103,995 89,469 23,626 11,449 5618 42,611 47 1,37,708 96 1854-55 107,744 92,716 48 25,420 14,850 5125 42,333 72 1,44,053 96 1854-55 107,744 92,716 48 25,420 14,850 5125 42,333 72 1,44,053 96 1854-55 124,429 96,385 19 19,004 11,464 8900 42,247 72 1,44,053 49 1876-57 124,167 102,255 19 19,004 11,464 8900 42,247 72 1,44,053 49 1876-57 124,167 102,255 19 19,004 11,464 8900 42,247 72 1,44,053 49 1876-57 124,167 102,255 19 19,004 11,464 8900 42,247 72 1,44,053 49 1876-57 124,167 102,255 19 19,004 11,464 42,653 134,469 104,482 6019 3433 1364 42,553 1,44,999 105 1859-60 125,947 105,497 6005 3210 1403 42,709 1,44,959 105 1859-60 125,947 105,497 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,497 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,497 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,497 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,947 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,947 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,947 4722 2572 1403 42,709 1,44,959 105 1859-60 125,947 105,947 1	1050 51	89,20	3 81,037	10	41,844	21,489		37,069		1,28,375	202
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187-75		- 114.42	90,895	19	19,004	11,404		42 247		1,47,618	43
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1870-71 133,938 108,628 1837 847 1829 49,268 1,59,714 95 1871-72 133,681 108,647 1092 834 1275 49,244 1,569,068 91 1872-73 133,681 108,060 2094 136.8 2142 49,147 1,569,068 91 1873-74 1,28,069 107,097 2762 1383 767 44,122 1,567,878 3,1874-75 132,771 107,051 2779 1408 616 49,114 1,57,681 86 1875-76 132,771 107,055 3019 1667 963 48,844 1,57,742 86 1876-77 136,701 161,637 07 4495 3162 1052 48,823 2,11,450 1877-78 137,273 109,270 4667 3442 1277 61,643 288 214,832 1878-78 137,273 109,270 4667 3442 1277 61,643 288 214,832 177,077 08 137,077 08 127,077 08	1868-69 .	. 184,58	2 100,024	١ ا	1865	578		49,308	1.	1,59,173	80
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1872 75 133 681 108 000 2001 135.8 2142 49.147 1.50.379 51 1873-71 129.009 107,097 2762 1383 767 49,122 1,57,873 53 1874-75 132,771 107,651 2779 1403 616 49,114 1,57,681 1875-76 132,773 107,635 3049 1403 616 49,114 1,57,681 86 1875-76 132,773 107,635 3049 14067 963 48,844 1,57,742 86 1876-77 136,701 161,637 07 4495 3162 1052 48,823 28,214,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,559 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 2,14,539 1877-78 137,273 169,270 4667 3442 1277 51,643 258 277,037 037 037 037 037 037 037 037 037 037		133,99	5 108,628			994		49,208	1		
1878-71 182,809 107,997 2762 1383 757 49,122 1,57,878 34 1874-75 182,771 107,651 2779 1403 616 49,114 1,57,831 86 1876-76 192,778 107,695 3049 1667 963 48,844 1,57,742 8 1876-77 136,701 161,637 07 4495 3162 1052 48,823 2,11,450 1877-78 137,973 162,270 4667 4405 162 1052 48,823 2,11,450 1877-78 137,973 162,270 4667 4405 162 1052 48,823 2,11,450 1877-78 137,973 162,270 4667 4405 162 1052 48,823 2,11,450 1877-78 137,973 162,270 4667 4405 162 1052 48,823 2,11,450 1877-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 4667 4405 1878-78 137,973 162,270 137,973 162,270 4667 4405 1878-78 137,973 162,270	1879 78	199,00	1 108,097					49 147	ĺ	1.50.370	
1874-75 132,771 107,931 2779 1403 616 49,114 1,57,831 86 1875-76 132,778 107,935 3049 1667 963 48,844 1,57,742 8 1876-77 136,701 161,637 07 4495 3162 1052 48,823 28,214,820 1877-78 137,973 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 288 214,822 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 127,823 102,270 4667 3442 127, 61,643 88,840 127,823 102,270 4667 3442 127, 61,643 88,840 127,823		182.80	9 107,997	1 .		1383		49.122	l	1.67.876	34
1876-76 182,778 107,935 3049 1667 963 48,844 1,57,742 Remaion Survey. 1876-77 136,701 161,637 07 4495 3162 1052 48,823 2,11,450 1877-78 137,973 102,270 4667 3442 127 51,643 258 2,14,832 1878-78 104,471 1871-78 104,471 1		182,77	1 107,951		2779	1409	616	49,114	ı	1,57,681	88
1876-77 136,701 161,637 07 4495 3162 1052 48,828 2,11,450 1877-78 137,273 162,270 4667 3442 127, 61,643 258 2,14,839 127,027 1877-78 1,643 258 2,14,839 127,027 1878-78 18	1876-76 .	182,77	8 107,938		3019	1667	963	48,844	}	1,57,749	1
1877-78 137,273 102,270 4067 3442 1277 51,643 258 2,14,832	Remaion Surve	.]		ļ			ļ	i			
1877-78 137,273 102,270 4067 3442 1277 51,643 258 2,14,832	30ra bu			ــ ا	4000	2000	1000	40.000	}		J
1070 10		. 186,79	1 101,037				1002	65,828	950	2,11,450	3
	3000 40	1 101/40	1 161.044				085	56.860		2,17,037	il
1879 80 181,402 169,172 11,909 6989 1189 67,110 500 2,16,921			2 159.179		11,909				500	2,16,921	d

In 1878, 215 villages of the old Hangal sub-division and the old Taras petty division were revised.² Under a new distribution of these villages, 119 had gone to New Hangal, sixty-five to Bankapur, twelve to Karajgi, twelve to Hubli, and seven to Kalghatgi. The

Hángal-Taras, 1878-79.

¹ Bom. Gov. Sel. CLV. 50, 52-53.

² Col. Anderson, Surv. Comr. 178 of 3rd February 1877, Gov. Res. 2854 of 3rd May 1877. Bom. Gov. Sel. CLVI.

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Hangul-Taras,
1878-79.

country included in this Hangal-Taras block of villages contained 399.45 square miles and was about forty-two miles from north to south. The nurrower strip to the north as far south as Dhundshi comprised the old Taras petty division, and the country to the south of Dhundshi comprised the old Hangal sub-division. Since 1847. when the former survey was introduced, communications had greatly The main road from Hubble to the port of Kumta by Sirsi passed through the Taras villages; another road between the Dhárwar plains and Kumta led from Bankapur by Haugal to Sirsi. From Bankapur a main line of road passed west to Mundgod in Kanara, from Mendgod two roads led to the coast one by Sirsi to Kumta, the other by Yellapur and the Arbail pass either to Kumin or to Karwar. The south of Hangal was crossed from east to west by a main line of read from Maisur through Haribar to Sirsi, A fifth line of road ran from south to north from Maisur through Hangal, Dhundshi, and Taras to Hubli. Minor lines and cross hnes were numerous. The average rupes price of husked rice had risen from 256 pounds in 1817-26 to 76 pounds in 1867-76; of jrári from 154 pounds to 70 pounds; of rági from 196 pounds to 102 pounds; of coarse sugar from 40 pounds to 16 pounds; of betchuit from 14 pounds to 6 pounds; and of coccanuts from 4s. Hid. (Rs. 2 as. 7,17) the hundred to 9s. 02d. (Rs. 4 as. 8,17). Shringeri Vad or dam across the Dharma at Shringeri, about six miles south-west of the town of Hangal, had a channel which ran about twelve miles filling many ponds on the way. A second dam near Kanchi Neglur, about thirteen miles lower down the . Dharma, fed the large Naregal reservoir. The min returns showed a rainfall at Hangal of 29:97 inches in 1873, of 54:64 inches in 1874, of 29:41 in 1875, and of 22:15 up to the 1st of October 1876. Comparing the ten years ending 1846-47 with the nine years ending 1875-76 the tillago area had risen from 54,071 acres to 125,171 acres; and collections from £8311 to £12,948 (No 83,110-Rs. 1,29,430). The following is a summary of the details:

Hancal-Toras Land Engine, 18-7-1876.

Year.	Occupied	Aral le	College	Elembe	Ort-
	Land	Navie	Stars	pions,	standage
1677 1647 1867-1857 1867-1867 .	Actors 54,871 81,169 127,046 125,171	Acres 111,123 72,120 10,000 13,604	Re 82,100 92,914 1,77,741 1,79,434	11,152 11,652 1166	Re. 40°4 81°5

In 1877 about seventy per cent of the Government land was tilled by the men whose names were entered as holders in the Government books, or by members of their families. The holders tilled three per cent in partnership with others and let sixteen per cent to tenants on money-rents and eleven per cent on produce or grain rents. Between 1873-74 and 1875-76 an average of 213 notices had been issued in default of timely payment of rent, and in two cases land had been sold for failure to pay. The returns showed an increase in population from 73,608 in 1848-49 to 80,373 in 1876 or

nine per cent, in flat-roofed houses from 1688 to 4422 or 162 per cent, in tiled houses from 2285 to 3670 or sixty per cent, in field cattle from 27,541 to 27,789 or one per cent, in carts from 1615 to 4253 or 163 per cent, in drinking ponds from 102 to 107 or 4.9 per cent, and in watering ponds from 1106 to 1179 or 6.6 per cent. On the other hand thatched houses had fallen from 11,228 in 1848-49 to 8892 in 1876 or twenty per cent, cows and buffaloes from 55,401 to 42,000 or twenty-four per cent, sheep and goats from 10,339 to 7962 or twenty-three per cent, and horses and ponics from 880 to 557 or thirty-six per cent. The climate and products of the eastern and western villages varied greatly. The eastern villages had a large area of excellent soil yielding jvári, cotton, and the other better class dry crops, and enjoying an excellent and certain rainfall. Though the early rains were the most important, the later or October rain was seldom wanting. The change in passing west was exceedingly rapid. While the eastern villages were pure dry-crop villages, the extreme south-west villages in old Hangal were pure rice villages. Every gradation of climate and tillage was passed through in the villages between the eastern and western extremes, every few miles increasing the rice element in the tillage. The change was specially marked and rapid in the old Taras petty division. The irrigational channels were in good repair. Cocoa and betel palm cultivation throve well, and sugarcane and betel vine were also grown. Dhundshi in the north and Alur in the south were the most important markets. 351 looms of which about one-fifth were blanket-looms were at work: the rest made coarse cloth for local use. Produce went to the coast and to the north and east. Rice went both to the coast and north to Hubli; sugar coconnuts and betel went chiefly to Hubli, and some went east; cotton went to the west coast. During the fair season fodder was in great demand. The husbandry and condition of the people were generally good, but, from their nearness to the Kanara forests, the western villages were poor and feverish.

Of the 215 villages, sixty-nine were entirely and 143 were partially reclassed. The following statement gives a comparison of the area of the different kinds of land according to the first and according to the second survey:

Hangal-Taras Arable Area

Hangat-To	iras Atable	Атеа. ————
Land.	Revision Burvey, 1877-78.	First Sarvey, 1847-48.
Arable Dry-crop	Aeres. 142,575	Acres, 140,245
Rice Land Garden Unarable	50,921 1101 61,059	52,057 807 60,331
Total	255,058	251,743

For revision purposes, the 215 villages were divided into six classes. The first class contained six eastern detached villages; the second contained thirty-two villages on the east margin of the old Hangal sub-division and the Taras petty division of Hubli; the third

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contained thirty-two villages immediately to the west of the second class; the fourth consisted of thirty-seven villages to the west of the third class; the fifth contained fifty-seven villages to the west of the fourth class; and the sixth class consisted of fifty-one villages on the western border in and on the margin of the forests. The highest dry-crop acre rates were 4s. 6d. (Rs. 2\frac{1}{2}) for the first class, 4s. (Rs. 2) for the second, 3s. 6d. (Rs. 1\frac{2}{4}) for the third, 3s. (Rs. 1\frac{1}{2}) for the fourth, 2s. 6d. (Rs. 1\frac{1}{2}) for the fifth, and 2s. (Re. 1) for the sixth. There was no rice land in the first class. Rice lands in the next four classes were assessed at 16s. (Rs. 8) an acre at the highest; and those in the sixth class at 14s. (Rs. 7). Garden land was assessed at a highest acre rate of £1 10s. (Rs. 15). The effect of the revised rates on the tillage area was an increase of 46·1 per cent. The details are:

Hangal-Taras Revision Settlement, 1878-79.

		FORME	Survey.		REVISION SURVEY.								
CLASS.	Vil- lages,	Occupi	Occupied Land.		Occupied Land.		Arable Waste.		stal.	of	Dry-		
					Assess- ment.	Area.	Assess- ment.	Arca	Assess- ment.	ment. Per cent.	crop Acre Rate.		
		Acres.	Ra.	Acres.	Rs.	Acres.	Re.	Acres.	Rs.		Rs a		
1 II VI VI	82 32 37 87 87	3542 29,255 20,508 23,897 29,838 18,097	3823 81,657 17,322 24,250 80,388 20,364	3568 28,593 21,326 23,696 30,027 18,348	6318 46,656 24,971 35,133 44,583 28,844	62 283 484 2066 5627 1897	25 412 188 1785 3056 1310	3630 28 876 21,610 25,762 35,654 20,245	0348 47,068 25,159 36,868 48,539 30,164	85-8 47-8 44-2 40-5 48-7 41-8	2 4 2 0 1 12 1 8 1 4 1 0		
Total.	215	123,187	1,27,704	125,658	1,66,505	10,419	7626	185,977	1 94,131	461			

During the ten years before the original survey settlement (1837-1847), the tillage area fell from about 59,000 acres in 1837-38 to about 46,000 acres in 1846-47, and collections varied from about £13,800(Rs. 1,38,000) in 1840-41 to about £9600 (Rs. 96,000) in 1837-38. During the first ten years of the survey lease (1847-57), the tillage area rose from about 52,600 acres in 1847-48 to about 108,300 acres in 1856-57 and collections from about £9400 to about £16,000 (Rs. 94,000-Rs. 1,60,000); during the next ten years (1857-67), the tillage area rose from about 114,000 acres in 1857-58 to about 127,000 acres in 1866-67, and collections from about £16,500 to about £18,100 (Rs. 1,65,000-Rs. 1,81,000); and during the eleven years ending 1877-78, the tillage area varied from about 127,000 acres in 1867-68 to about 123,000 acres in 1876-77 and collections from about £18,000 to about £17,300 (Rs. 1,80,000 - Rs. 1,73,000). During the two years after the revision settlement (1878-80) the tillage area fell from about 125,000 acres in 1878-79 to about 124,000 acres in 1879-80, but collections rose from about £24,000 to about £25,000 (Rs. 240,000-Rs. 2,50,000). The details are :3

² Bom. Gov. Scl. CLVI. 37-39, 54.

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1878-79.

Hangal-Taras, 215 Villages: Survey Results, 1837-1880.

		;				<u>_</u>					
			'ILL AGE.			WASTE.	· · · · · · · · · · · · · · · · · · ·		Out-		Jein
YEAR.	Rain-				I ——			Quit	stand-	Collec-	Rupec
	fall.	l		Re-	1	l	Grazing	Rent.	ings.	tions.	Prices.
		Arca.	Rental.		Arca.	Rental.	Fees.	l			Linus
·	i	i	1	Pions.	l	l		l			1 1
							<u> </u>				 1
Before	Į	ĺ	i		ł	ì			į į		!!
Surrey.	[[n	Acres,	Re.	Rel	Acres.	Rs	Rs	Rs.	i ita i	Rs.	Lbs. i
	1	l	'						{ '		
1537-34		17,020	1,02,415	27,60	101,630	1	367	47,173	26,346	PS 440	157
163~39		89,241	1,04,151	32,724	105,166	١.	172	44,003	7(51	1,11,057	100
1429 40		7,PG3	1,00,442	14,497	105,250 100,221 110,131	1	411	47 322	134		213
1840 41 . 1841-42 .	***	57,123	P5,822	1170	100,221	ľ	653	44,626		1,33,019	150
1643-43		67,815	10,411	81.0	110,134		450	47,713	2,196	1,31,451	172
1503-44	***	53,591	26,761	(270	113,102 115,931	1	1447	47,012	3,720		193
1014 14	***	44,(4)	91,771 65,763	23.0	122,013		1212	49,521	4,207	1,83,921	235
1915 44	• •	45,317	87,163	9:07	125,633	•	851 40-0	41,003	150	1,21,056 1,21,810	233
1505-17	:::	45,916	£0,412	47.1	120,439		4391	43,440	710	1,21,999	2.8 102
		1,0	,	1,01			4.27	40,710	' ' '	الا الرحمود	102
Survey.											
1F17-49		62,576	61.610	11,479	75,523	85,343	3775	40,681	20,935	93,674	180
1545-49		(3.00)	77,602	109	65,473	47,113	10,925	33.561	335	1,33,722	192
1949 50 .		77,916	\$0,431	C.	64.*27	37,218	13.603	30,202	8	1.40.142	152
1650 61	••	77, -7	£1,574	12	85,000	23,415	11,762	35,711	30,532	1,03,403	356
1:51-52		61,v16	63,472	<u>اع</u> (61,405	31,0-0	10,611	35,650	l i	1,3.,055	172
1552 53 .	***	t 2,767	91,85	15	61,013	31,414	5-20	33,279		1,30,079	160
1513 54	***	£2,075	P1, 12	13)	51,740	35,747	10,034	23,013	15	1,41,455	320
1454 55 . 1-53-66	• • •	69.64	0.27		43,230	23,234	10,276	26 633	1	1,47,116	144
15 6-57	***	97,133	1.03,81	14	27,252	:6,270	0 20	23,614		1,51,001	120
1-57-75	•••	103,220	1,14,164	• 1	21,192	18,053	6781	22,003		1.5 .051	104
11.55 23	•••	116,411	1,21,03	• 1	27,59	14.421	1,450	49,049 33,470		1 63,631 1,68,837	113
1159 60	•••	1.1,255	1.25.21		21,303	13,517	4793	33,720	i	1,65,522	160
156061	::	121,621	1215	. 1	16.82	8133	424	40,400		1,73,455	112
15/1-62	- ::	105,507	1,2745.	:. I	11,72	8153	4777	42,2 %	1	1.70,447	100
157:41	- ::	125,207 127,197	1.3 077	-:: 1	12.9.7	7023	14.9	42,225	1	1,77,963	43
15-63-61	- ::	125,070	1.40.5	T: 1	17,20	100	6769	42.233		1,78,430	461
I-61 65		159,004	1,31,701		17 235	7313	(452	42,537		1,69,103	40
16/5///		1.6,570	1,70,517	٠. ا	19 614	7309	C238	43,757	1	1,40,144	44 [
15.607		127,579 127,013	1,30,457	[13,110	C-39	C719	43,533		1,41,107	48
157-63 -	•• [127,03	1,20,276	••	12,951	6637	5077	47,153		1,10,100	.60
15.970	٠ .	127,021	1,50,930	٠٠ ا	12,970	C729	4725	44,142	l i	1,70,073	100
1870-71	• 1	126,694	1,20,454	٠٠ إ	15.477	727) 7672	4215	47,277	1	1,77,00	104
1571 72		120,027 125,773	1,80,279	٠٠١	14,017	8 35	1113	13.00		1,77,0%	. 61
117777	. 1	124,243	1.27.		14,513	P177	470	42.937		1,70,025	45
1472 74 "	27:07	121,000	1,5 231	٠.١	15,771	Mis	3171	42,615	i	1,71,730	ii
1674 75	61 61	121,670	1,24103	":ss	12, 01	7015	3/273	42,-11		1,74,017	. ñ
1477 76	200	127,1*7	1 27 701		12,770	8175	200	42		1,73,261	64
1476 77		1.3.023	1,27,657		12,473	127	2573	42.6-3	12	1.72.076	61
1177.78		123,724	1,23,271		13,23	6157	2011	43, 21	325	1,72,07n 1,74,775	
Remmon			[]				•		1	1	1
Surrey.							Ì				l
1476-77 .	ا ا	125,273	1,57,130		11,013	9.171	2,517	47,572	0.55	2,27,677	1
1679 FO		124,294	1,50,561		12,0-5	10,055	2,252	47,0.72	315,	2,45,437	1
"1	(i (1			<u> </u>		1		

In 1878, the revision settlement was begun in 130 villages of the old Ránebennur sub-division, which had been settled in 1847-48. Of these villages, at the time of the revision settlement, ninety-four were in Ránebennur and the remaining thirty-six were in Karajgi. According to the old survey the area of these 130 villages was 304,559 acres, and according to the revision survey it was 306,276, of which 53,411 were unarable. Except its neighbour Kod, Ránebennur was the most southern sub-division of the Bombay Presidency above the Sahyádris. It was bounded on the east and south by the Tungbhadra which, excepting two villages on the eastern bank, separated it from Belári on the east and from Maisur on the south.

Ránebennur, 1878-79.

¹ Col. Anderson, Surv. Comr. 75 of 21st January 1878, Gov. Rev. 1516 of 26th March 1878, Bom. Gov. Sci. CLIX.

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The Bi Randebennur,
St. 1878-79,

On the west there were the old Bankápur and Kod sub-divisions and on the north the alienated district of Sángli. During the thirty-two years ending 1877 local produce prices had varied for husked rice from 160 pounds the rupee in 1850 and 1851 to 24 pounds in 1865 or an increase of 566 per cent; for Indian millet or juári from 256 pounds in 1852 to 18 pounds in 1865 or an increase of 1322 per cent; and for wheat from 84 pounds in 1848 to 6 pounds in 1865 or an increase of 1300 per cent. The following statement gives a summary of the prices during the twenty-nine years ending 1876. The average of the ten years ending 1867 was much raised by the exceptional prices which prevailed from 1862 to 1865, the years of the American War during which cotton had risen to over £70 (Rs. 700) the khandi:

Produce Rupee Prices, 1848-1876.

Year.	Husked Rice.	Jedri,	Wheat	
1848 - 1857 1858 - 1807 1858 - 1876	Pounds, 138 56 57	Pounds. 174 72 76	Pounds. 74 36 28	

When the original survey was introduced these villages did not contain one mile of made road. Since 1846 the tract had been crossed by two main lines; one from Bangalor and Harihar, where there was a bridge over the Tungbhadra, to Hubli, the old made road from Poona to Bangalor; and one which branched from the Poons-Bangalor road about four miles north-west of Harihar and passed through Kod and Sirsi to Kumta. A third road ran east and west through the north of the tract from Hayanur to Hangal and Kumta, and carried much traffic between Belári, from which Hávanur was about ninety miles distant, and south Dhárwár. All these three routes especially the Poona-Bangalor trunk road carried a heavy cart traffic during the greater part of the year, and created a great demand for fodder. Other local roads joined large markets and formed feeders to the main lines. A comparison of the average of the ten years ending 1856-57 and 1876-77, shows a spread from 96,179 to 157,603 acres in the tillage area, a fall from 86,388 to

1 Bom. Gov. Sal. CLIX. 13-14, 43. The details of the thirty-two years are: Respectively. Produce Rures Prices. 1846-1877.

YEAR,	Husked Rice.	Jedri.	Wheat.	YEAR,	Husked Rice.	Jodsi.	Wheat	YEAR.	Husked Rice.	Judri.	Wheat
1846 1847 1848 1840 1850 1851 1852 1853 1854 1856	128 140 142 160 160 160	1/bs. 90 162 192 183 238 238 256 128 128	Libs. 60 60 84 71 80 80 87 80	1857 1868 1899 1860 1861 1862 1863 1864 1865 1867	128 92	Lbs. 112 123 108 80 38 18 44 96	Lbs. 60 64 76 13 12 6 24 34	1868 1869 1870 1871 1873 1874 1875 1876	Lbs. 48 48 72 49 48 61 64 69 64	Lba. 00 70 112 58 84 76 60 72 49 16	Lbs. 44 16 14 22 24 28 38 39 11

31,279 acres in the waste arable land, and a rise in collections from £8076 to £11,569 (Rs. 80,760-Rs. 1,15,690). The details are:

Ranebennur Land Revenue, 1837 - 1877.

Year.	Tillage.	Waste.	Collec- tions-	Remis- sions.	Out- stand- ings
1837-1847 1847-1857 1847-1867 1847-1877		Acres. 142,571 86,399 38,117 31,270	Re. 78,014 80,760 1,11,651 1,15,698	2142	Re 4179 5219 476

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In 1878, eighty-one per cent of Government land was tilled by the men whose names were entered as holders in the Government books, of which they tilled three per cent in partnership with others. The holders let to tenants fourteen per cent on money rents and five per cent on grain rents, generally one half of the crop. During the thirty years ending 1877, the returns showed a rise in population from 66,064 in 1817 to 82,469 in 1877 or 24.8 per cent; in flat-roofed and tiled houses from 9160 to 14,784 or G1.4 per cent; in field cattle from 18,042 to 20,110 of cloven per cent; in carts from 899 to 3114 or 246 per cent; in wells and water-lifts from 687 to 1032 or fifty per cent; and in drinking ponds and reservoirs from fifty-six to sixty-eight or twenty-one per cent. Thatched houses showed a fall from 3701 to 2710 or 26.8 per cent; cows, buffaloes and their young from 37,342 to 26,635 or 28.7 per cent; sheep and goats from 36,118 to 22,761 or thirtyseven per cent; horses and ponies from 623 to 427 or thirty-one per cent; and watering punds and reservoirs from eighteen to seventeen or five per cent. The north and west of the tract was chiefly black cotton soil, and in the centre and west black and red gravelly and stony soils were mixed, and the country was broken by several ranges and patches of low stony red hills. All the better rice land bore sugarcane every third year or an after-crop of grain or pulse. The climate of the cast and the west of the tract differed greatly. In the west and centre, the rainfall was generally sufficient and favourable and much more certain than in the cast and north-east. The extreme northeast of the tract lay on the edge of the belt subject to uncertain rainfall. The rest of the tract shared in both monsoons and enjoyed an unusually large supply of the castern or Madras monsoon, Of the whole crops about sixty-two per cent belonged to the early and thirty-eight per cent to the late harvest. It was essentially a dry crop tract jrári, tur, wheat, oilseeds, and cotton being the chief crops. The New Orleans variety of cotton was more largely grown than the native sort and throve well. What rice was met with was mostly grown in the west. Only five villages had large reservoirs with water lasting till late in the hot weather, when the supply was restored by the early May thunderstorms. The chief crops were jvári covering thirty-four per cent, tur 3.8 per cent, castor 2.9

I The average outstanding balance Rs. 476 in the 'ten years ending 1677 is due entirely to the outstandings of the famine year 1876-77. Bom, Gov. Sci. CLIX. 15.

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per cent, kulthi 4.9 per cent, and American and country cotton fourteen per cent of the area under tillage. Cotton was the largest and most valuable export. Besides cotton, grain of all kinds was exported, and oil-seeds, sugar, coconnuts, and betelnuts were all valuable products most of which were grown for export. The tract was well supplied with markets, those of Byadgi, Ranebennur, and Gutal being the chief. Throughout the tract tillage was good, the fields were fairly cultivated, and manure was freely used. The people were well-to-de-

Changes caused by Tungbhadra floods made revised measurements necessary over a large area. For revision purposes the villages were arranged into four classes. The first class comprised thirty-five villages close to the great Poona-Bangalor road. The second class included twenty-four villages to the south-west of the first class. The third class contained sixty-three villages to the east and north-east of the sub-division. The fourth class consisted of the eight extreme north-eastern villages. The highest dry-crop acre rate for the first was 4s. (Rs. 2); for the second 3s. 6d. (Rs. 1); for the third 3s. 3d. (Rs. 1;); and for the fourth 2s. 9d. (Rs. 1;). The rice lands were assessed at ann uniform highest acre rate of 16s. (Rs. 8). For garden lands a highest acre rate of £1 4s. (Rs. 12) was adopted. The effect of the revision settlement was an increase of 40·1 per cent. The details are:

Ranelennur Revision Settlement, 1878-79.

1		l'ornes	SLRYRY.	}			Retisios	SCRUPT			
CLASS.	Vil-	Occupie	d Land.	Occupio	d land,	Arsbio	Waste.	To	tal.	Incresse of	Highest
			Arrens. ment.	Arta.	Assess. ment.	Area.	Apress.	Area.		of Assess ment Fer cent	Acre Rate.
I II III IV .	130	Acres. 52,175 22,233 74,617 6746	18,757 49,357	77,512 77,525 7182	61,730 21,737 67,580	103	873 6301 92	Acres 66,251 21,004 90,719 7220	25,170	31.0 21.4 31.4	Hs. a. 2 0 112 110 1 6

During the ten years before the original survey settlement (1837-1847) the tillage area fell from about 75,000 acres in 1837-38 to about 50,000 acres in 1846-47, and collections varied from about £12,450 (Rs. 1,24,500) in 1839-40 to £9450 (Rs. 94,500) in 1845-46. During the first ten years of the survey lease (1847-1857), the tillage area rose from about 65,000 acres in 1847-48 to about 125,000 acres in 1856-57, and collections from about £5500 to about £13,000 (Rs. 55,000 - Rs. 1,30,000); during the next ten years (1857-1867), the tillage area rose from about 181,000 acres in 1857-58 to about 163,000 acres in 1866-67 and collections from about £13,200 to about £15,600 (Rs. 1,32,000 - Rs. 1,56,000); and during the cloven years ending 1877-78 the tillage area fell from about 163,000 acres in 1867-68 to about 156,000 acres in 1877-78 and collections from about £15,500 to about £13,500 (Rs. 1,55,000 - Rs. 1,35,000). During the four years after the revision settlement (1878-1882), the

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tillage area fell from about 147,000 acres in 1878-79 to about 135,000 acres in 1881-82 and collections from about £18,200 to about £16,000 (Rs. 1,82,000 - Rs. 1,60,000). The details are:

Ranebennur, 130 Villages: Survey Results, 1837-1882.

				naages		y -1001)~·	
1		TILLAGE		1	WASTE.]	0	 	F-4
Year	Area.	Rental.	Remis- sions.	Area.	Rental.	Graz- ing Tees.	Quit Rent.	Out- stand- ings	Collec- tions.	Jedri Rupco Prices.
Before Survey.	Acres.	Rs.	Rs.	Acres.	Rg.	Rs.	Rs.	Rs	Re	Pounds
1837-29	75,394	1,07,711	29,152	120,974	22,183	101	30,827	11,525	97,965	
11030-40	74,004 72,275	99,495 95,210	27,383 6211	128,9°2 130,737	21,731	165	28,351	4555 518	00,061	•••
1810 41	60,513	91,214	4075	133,874	29,157	770	84,899 34,199	6933	1,24,527	:
1841-42	67,688	02,700	3272	136,223		1396	33.404	8512	1.15.910	
1842-43 .	C3,985	80,836		142,250	35,504	1697	20,003	2758	1,13,830	
1843-44 1844-45	55,781 72,319	78,313	1715	150,236	42,051	1948	29,986	2418	1,06,101	
104E 40	47,125	74,604 69,434	1018 6230	154,174 160,702	44,891 51,076		20,174	712	1,04,297	96
1846-47	49,680		2412	150,554	60,931	6743	27,477 27,712	2373 1859	91,600 1,02,280	162
Sure-y.	,			1		0,		2000	1,00,000	}
1847-49	65,196	78,095	20,905	110,797	<i>67,</i> 878	4074	23,216	30,037	65,303	192
1849 49 .	78,107	60,987	166	103,212	51,431	9700	20,020		1,00,450	162
1810 0	78,026	70,005	45	103,320	51,449	8651	20,593 20,496		00,807	238
1850-61 1851-62	81,938 97,276	72,809 81,038	9 8	100,523	49,370	8523	20,496	22,100	70,716	239 256
1070 10	101,634	85,490	8	85,314 81,211	39,230 30,831	7971	20,370 20,400	•	1,11,736 1,13,816	129
1853-64	102,364		222	81,688	37,936	8415	22,881	45	1,16,693	128
1854-55	111,247	90,545	45	73,209	33,334	9637	22,097		1,23,174	103
1855-56 .	119,787	01,726	11	65,015	29,475	8031	23.009		1,25,785	
1856 57 1857-88	125,307	09,032 1,02,118	***	59,638 54,237	20,180	8063	23,073		1,20,168	112 120
1855-69	130,740	1,05,022	:::	50,870	22,107 20,441	03/0	23,273		1,32,266 1,35,174	108
1859-60	185,297 189,455	1,07,267	***	46,771	18,229	6767	23,120 23,627		1,37,581	
1860-01	147,144	1,11,180	***	39,249	14,478	5682	23,942 27,710		1,40,601	80
1001-02	142,966	1,00,012	• •	45,622	17,295	7491	27,710		1,44,213	• 1
1862-63 1863-61	149,107	1,12,0 ₀ 2 1,17,193	***	39,767 27,469	14,619	7153	17.416 27,449	***	1,46,661 1,52,218	28
1861-65	161,63° 161,072	1,18,207		25,125	8567	11,003	27,003		1,66,093	18 (
1865-66	163,217	1.18.009	,,,	28,051	8896	2540	23.179		1,56,028	44
1F6G-67	103,250	7,18,035		25,093	8850	10410	27.616	•••	1,56,061	96
1867-68	163,230	1,18,021	***	20,014	8484	9774	27,611 27,661		1,55,406	96 70
1869 69 . 1869 70	160,456 150,780	1,16,663	***	23,832 29,871	10,079	8100	27,686	•	1,52,610	112
1870-71	150,165	1,16,393	*** 7	30,540	10,693	2786	27,778	•	1,61,930	68
1871-72	156,623	1,15,328	'	82,974	11,700	5418	27,778 27,721		1.43.467	61
1872 73	151,022	1,14,000	***	85,001	13,001	8003	27.724	***	1,17,702 1,47,080	76 79
1873-74	154,554	1,14,300		35,059	12,770 12,285 12,232	5149	27,631		1,47,030	79
1874-75 1675-76	165,094	1,15,148 1,15,228	***	33,946 33,772	10,030	8574 8570	27,495	j	1,48,207 1,43,320	49
1876 77	165,503	1,16,035	- ::	26,214	9307	2870	27,513 27,698	4780	1,40,747	15
1877-78	165.913	1,15,215		23,831	8029	2014	27,621	10,177	1,34,606	
Revision Survey.								·		1
1,000 00	147.132	1,55,793	i	30,677	15,567	1603	29,619	4941	1,82,004	I
1879 80	136,949	1.49.230	.::	48,249	23,114		29,610	448	1.79.774	-:'
1830 81	131,710	1,49,230 1,49,330	47	50.558	24,314	1303	27.639	162	1,79,028	
1851-82	135,331	1,49,122	15,270	60,505	,23,761	1158	20,220	4859	1,69,672	•••
, ,										

In 1878-79 the revised survey settlement was introduced into 247 villages of the old Kod sub-division.² The thirty years' survey settlement had been introduced into 245 of these villages in 1848-49 and into the two remaining villages in 1861-62. At the revision survey 178 of these villages belonged to Kod, twenty-three to Ránebennur, twenty-eight to Karajgi, and eighteen to Hángal. The total area of the sub-division was 334,267

Kod, 1878-79.

Bom. Gov. Sel. CLIX. 43-45.
 Col. Anderson, Surv. Comr. 150 of 14th February 1879, Gov. Res. 1678 of 27th March 1879. Bom. Gov. Sel. CLX.

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The B: Kod, 1878-79,

acres.1 The old Kod sub-division was the most southern part of the Presidency above the Sahyadris. It formed a projection into Mais: which bounded it on the east south and west separating it for North Kanara and the coast. The north and east of the sub-division had some black cotton land, but the soil was generally gravelly an sandy. The surface was waving and broken by small hills. In the south a well marked chain or ridge of hills 300 to 400 feet high, ran across the sub-division from west to east, beginning on the Maisur border and ending a little short of the Tungbhadra. On the south between Kod and Maisur was a similar and nearly parallel chain. Between these two chains ran a valley four to ten miles wide. Different parts of Kod varied considerably in climate. In the east the rainfall was seldom so heavy as to damage the best dry-crop tillage; further west the rains were heavier and in the extreme west the villages were rice villages. Its southerly as well as its westerly position gare Kod a share both in the south-west and in the north-east monsoon. The south-west was the chief stand-by and rarely failed. In common with the rest of the district, in late April and during May, heavy thunderstorms often several days in succession put water into the ponds and soaking the ground allowed ploughing and other field work to be begun. Hence about nine-tenths of the whole cultivation was early or kharif. Entire failure of crops from drought was unknown though it often happened that the monsoon was more favourable for one kind of cultivation than for another. The climate was in general singularly temperate. In March and April beyond a few hours in the middle of the day there was no real heat, and the nights were always cool and pleasantly moist. This and the steady and certain monsoon rainfall were due to the fifty miles of woodland that lay between it and the crest of the Sahyadris. In the east the bulk of the tillage was dry-crop jvári, cotton, and oilseeds; in the west rice and for dry crop ragi instead of jvari were the main crops. Much sugarcane, the 1876 area was 1262 acres, was grown in the lower rice lands watered from ponds; cocoa and betel palms were also grown in the gardens. Kod's special crop was the red chilly or capsicum which was grown as a dry-crop, sometimes in fields of several acres. No fewer than 1217 ponds were used for irrigation, but few of them were in good repair. Of the total popu-

Bom, Gov. Sel. CLX. 1. The details are:

Lan	D		1848 Sarrey.	1878 Survey.
Dry-grop . Tilco Garden Unarable	## ## ##		Acres. 227,495 86,650 1290 67,522	Acres. 244,650 32,553 1988 55,096
	Total	[332,957	334,267

The increase in the total arable area and decrease in the unarable was due to the removal of land from unarable to arable in consequence of its being of a quality which could now be cultivated with profit. The decrease in the rice land was due partly to the transfer of a portion to the garden head, but mainly to a transfer from the rice head to that of dry-crop. Bom. Gov. Sel. CLX. 4.

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lation of 92,675 about sixty-five per cent were purely agricultural, fourteen per cent were partly agricultural, and twenty-one per cent

were non-agricultural.

Returns prepared in 1876 showed 17,018 or 60 per cent Government and 11,354 or 40 per cent alienated survey fields in occupation. Of the Government fields 13,053 or forty-six per cent were tilled by the man who appeared as holder in the Government books, 436 fields or 1.54 per cent were tilled by the occupant in partnership with other persons, and 3529 fields or 12:43 per cent were let to tenants. Of the tenant-tilled holdings 2411 were held on money rents and 1118 on grain-rents, which generally consisted of one-half to one-third of the produce.1 The registration records seemed to show that private sales of land were less common than in other parts of the district. Prices, though registration prices have to be taken with caution, ranged from five or six to twenty times the assessment. Large sums were advanced on land mortgages. In 1848 at the beginning of the survey settlement the sub-division had not a mile of made road. During the thirty years' lease the opening of the old Bombay-Madras mail road which passed through the north-eastern villages secured communication with Hubli, Dhárwár, and Belgaum to the north and with Maisur to the south. Coastward one line led by Kod, Haunsbhavi, and Tilvalli through Sirsi to Kumta; and a second line from Hirekerur by Sitalkop, a large trade centre about ten miles within the Massur frontier, by Siddapur in North Kanara, whence one road went to Sirsi and Kumta and another went down the Gersappa pass to Cross roads were numerous. There was no want of good markets both within and at no great distance beyond the boundaries of the sub-division. Tuminkatti, Musur, Chik-Basur, Hirekerur, Chikkerur, Rattihalli, and other minor market towns lay within the sub-division, and Byadgi, Hangal, Haveri, Sirálkop, and Ránebennur were all first class places of trade at no great distance over the horder. The manufactures were confined to the usual cotton and woollen hand-loom weaving. Of 437 looms 394 were used for making cotton cloth and forty-three for making blankets.

In 1818-49 Kod was in a state of extraordinary depression, considerably worse than that of the neighbouring parts of Dhárwár. This depression was owing to its isolated position. The neighbourhood of Maisur and the want of roads entirely cut it off from markets. It was not till 1872 that roads were opened from Kod through Maisur territory to North Kánara. But from 1848 lines between Dhárwár and Kánara began to be opened and between 1850 and 1860 much progress was made. Taking the average for three of the chief markets of the sub-division, Kod, Rattihalli, and Hirekerur, the produce prices during the fifty-nine years ending 1876 were for Indian millet or jvári 243½ pounds the rupee during the ten years ending 1827, 188½ during the ten years ending 1837, 244 during the ten years ending 1847, 302½ during the ten years ending 1857, 105 during the ten years ending 1867, and 77½ during the nine years ending 1876. The details are:

¹ Col. Anderson, Surv. Comr. 150 of 14th Feb. 1879, Bom. Gov. Sel. CLX. 13.

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Kod Rattihalli Hirekerur Produce Rupec Prices, 1818-1876.

Year.	Rice in Husk,	Jedri.	Ndchni.	Coarse Sugar.	Betel- nuts.	Cocoa- nuts per 100.
1818-1827 1828-1837 1838-1847 1848-1857 1858-1867	179 671	Lbs. 2431 1682 244 3021 105 771	Lbs. 297 231 307 3031 1241 081	Lbs. 50 44 42] 38 17] 13]	Lbs. 181 13 191 11 81	Rs. a. p. 2 0 0 2 2 1 2 2 0 2 1 11 3 4 10 3 15 2

The prices of the most valuable and least bulky articles showed a comparatively smaller advance. Cocoanuts and betelnuts had always been in high demand and were easily carried; even in these articles the increase in average price during the nine years ending 1876 compared with the ten years ending 1847 was not less than ninety per cent. In sugar and the different kinds of grain grown in the sub-division the increase in price ranged between 200 and 300 per cent. Even allowing that the prices of the nine years ending 1876 were in the earlier years somewhat influenced by the American war, the existing range of prices was still fully 150 per cent higher than it had been thirty-five years before. Cotton had also risen about 150 per cent.

Excluding the two lapsed villages into which the survey settlement was introduced in 1861-62, in the 245 Kod villages settled in 1848-49, during the ten years ending 1847 the average occupied area of Government land was only 48,899 acres, that is less than one-third of 150,215 acres the corresponding area of arable waste. The revenue for these ten years averaged £7256 (Rs. 72,560) with average yearly remissions of £503 (Rs. 5030) and average outstandings of £153 (Rs. 1530). In 1847-48 only 38,447 acres were held for tillage and 159,278 arable acres were waste. After the introduction of the settlement the spread of tillage and the increase of revenue from the occupation of waste was steady and without check. The following statement gives the occupied area and revenue for the year 1847-48 and for every fifth year since 1848-49:

Kod Tillage and Revenue, 1847-1878.

Yea	R.	Govern- ment Occupied Land.	Collec- tions,	Year.		-	Gorern- ment Occupied Land,	Collec- tions,
1847-48		Астев. 88,447	Rs. 61,544	1803-64	***		Acres. 174,763	Rs. 153,058
1849-49 1853-54	***	 50,535 80,404 126,493	53,676 68,020 116,471	1868-69 1878-74 1877-78	***		100 010	153,693 147,867 150,427

The increase of the occupied area which took place between 1868-64 and 1868-69 was not maintained. In 1866-67 the occupied area amounted to 183,298 acres. This great tillage area was due to the extremely high price of cotton. Under ordinary prices very little land in Kod grows a paying cotton crop. But prices were then so

high that the poorest crop, not more than eight inches high and with an acre yield of not more than ten pounds, paid. On the fall to normal prices which set in about 1868 some of the poorer land ceased to pay and was thrown up. Still during the four years ending 1878 the area held for tillage was over 170,000 acres a much higher figure than had been reached before the American war. In 1878 an area of 35,121 arable acres bearing a survey assessment of £2199 (Rs. 21,990) remained waste. Much of this land had been waste for generations, and could not be brought under tillage without considerable labour. The following statement shows the ten years' averages of tillage and revenue for the ten years before and the thirty years of the settlement:

Kod Tillage and Revenue, 1838-1878.

Year.	Tillage.	illage. Waste,		Remis- sions,	Out- stand- ings.
	Acres.	Acres.	Rs.	Rs.	Rs.
1839-1848 1848-1858 1853-1808 1803-1878	48,809 87,865 162,103 170,897	180,215 115,460 44,978 85,946	72,563 86,461 1,42,826 1,49,991	6027 44 2	1529 2623 26

The total land revenue of the sub-division under every head, Government land assessment quit-rent and grass sales, fell from £10,902 (Rs. 1,09,020) in 1847-48 the year before settlement to £9628 (Rs. 96,280) in 1848-49 the year of settlement, and rose to £20,681 (Rs. 2,06,810) in 1877-78 the last year of the settlement. During the survey lease population increased from 71,693 in 1848 to 92,675 in 1876 or 29.2 per cent; flat roofed and tiled houses from 3416 to 5381 or 57.5 per cent; farm cattle from 29,332 to 36,287 or 23.7 per cent; carts from 1626 to 4503 or 177 per cent; and watering ponds from 1195 to 1217 or 1.9 per cent. On the other hand thatched houses fell from 15,080 to 14,353 or 48 per cent; cows and buffaloes from 80,107 to 54,662 or 317 per cent; sheep and goats from 17,972 to 14,275 or 20.5 per cent; horses from 823 to 548 or 33.4 per cent; and drinking ponds from 183 to 175 or 4.3 per cent. In the famine year of 1876 the population was 92,675. Though Kod scarcely suffered from local failure of crops, the high price of grain forced perhaps two or three thousand of the poorer classes to leave the district in search of work. The increase in the population had not been great, only twenty-nine per cent in the thirty years. This, in Colonel Anderson's opinion, was chiefly due to epidemics of cholera which generally once in five years caused a large number of deaths. The increase in houses of the better class and in farm cattle proved a very considerable accumulation of agricultural capital. The decrease in cows and buffaloes and in sheep and goats was caused by the spread of tillage. The great increase in carts was an evidence of the development of trade. The carts were used in field work, but their chief object was to carry produce to market. Most of the watering pends were very small; many of them did not water more than one or two fields. All over the country remains of embankments showed that at some former time not a single suitable

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site had remained unused. Of 2859 watering and drinking wells 653 had been made during the survey lease. During the three years ending 1876-77 in seventy-four villages an average of 182 notices to pay rent had been issued. This Colonel Anderson thought was not excessive in a sub-division which was bounded by foreign territory separated by an artificial boundary. In 1879 the people seemed well-to-do. They enjoyed a climate above the ordinary risks of drought; their lands yielded a great variety of products many of which were always in demand at good prices; they had fair outlets for their produce to the coast and in other directions, and for thirty years had enjoyed a very moderate assessment. Especially in dry crop land the tillage was more careless than in almost any part of Dharwar. Waste grass patches in a field supposed to be tilled were not uncommon. This roughness and imperfection were due to the very rapid spread of tillage and had been encouraged by the extremely low assessment. The thirty years' lease had raised the subdivision from a state of extreme depression to a state of extreme prosperity. In the south of the sub-division a good deal of hilly and broken ground at the time of the first survey had been measured with the cross staff and chain. In spite of this the total area under the two surveys showed a difference only from 332,957 to 331,267 acres. Though the gross area of the two surveys corresponded so closely some considerable differences occurred in detail. Tungbhadra formed the eastern boundary for a distance of some twelvo miles. This large river was subject to great floods, which often removed the boundary marks and both added to and took away land from neighbouring fields. The very numerous ponds were another cause of considerable changes in the areas of fields above them. The former survey showed 22,606 fields. In the revision survey the sub-division of large numbers and the making separate occupancies into separate survey numbers raised the whole number to 32,689 survey fields. Of the 22,606 old survey fields, the difference between the areas of the two surveys was within five per cent in 21,157, between five and ten per cent in 967, between ten and fifteen per cent in 268, between fifteen and twenty per cent in 90, and over twenty per cont in 124. As in other revised blocks the classing of land was changed no more than was required to obtain a base of assessment in accordance with the revision standard. As a rule fifteen per cent of the better drycrop and twenty-five per cent of the poorer soils were reclassed. More was done if the reclassed percentage showed that more was required. In watered land when the area of rice lands in a survey field differed one-half to one-third from the former area, the soil was reclassed. When the difference was less than one-third the old classification was confirmed with whatever adjustment the general examination of the soil classification of the village showed to be necessary. The changes in the watersupply during the thirty years' lease made a complete reclassing

¹ To collect the revenue, in 1874-75 forty-eight villages had 56 notices and one distraint; in 1875-76 sixty-five villages had 75 notices and 10 distraints; and in 1876-77 100 villages had 415 notices and 9 distraints. Bom. Gov. Sel. CLX. 18.

everywhere necessary. Less soil had to be reclassed than in most revisions. Except that it had not allowed interval enough between the better and the poorer soil, the former classing was good. In entirely reclassed land, where the new classing was much higher than the former classing, a reduction of an eighth (2 as.) was made. In the 1848-49 settlement Captain Wingate divided the villages into four classes with highest dry-crop acre rates ranging from 2s. 9d. to 1s. 63d. (Rs. 13 - 121 as.) These classes divided the sub-division north-west and south-east into four parallel strips according to the variation of the rainfall from west to east. Under the revision survey the sub-division was divided into five classes instead of four. In making the five new classes the general idea of the original grouping was kept, but some detail changes had become necessary chiefly from the opening of roads and markets. In the first class, with a highest dry-crop acro rate of 49. (Rs. 2), were placed twenty-three villages forming a projection in the extreme north-east of the sub-division, and having a moderate rainfall favourable for good dry-crop cultivation. In the second class, with a highest dry-crop acre rate of 3s. 6d. (Rs. 13), were placed eightynine villages forming the general north-eastern portion of the sub-division. The rainfall in these villages was not too heavy for good dry-crop tillage, though it was somewhat less suited than the climate of the first class. The villages were also worse off for communications. In the third class, with a highest dry-crop acro rate of 3s. (Rs. 11), were eighty-seven villages to the south-west of the second class, and somewhat inferior in dry-crop climate and in communications. In the fourth class, with a highest dry-crop acro rate of 2s. 6d. (Rs. 14), were placed the forty-four western villages either with too heavy a rainfall for dry crops or difficult to get at because of hills. In the fifth class, with a highest dry-crop acre rate of 2s. 3d. (Rs.11), were placed four villages in the extreme south-west corner of the sub-division. They formed two projections into Maisur and both in regard to rain and to roads were less suited for dry-crop tillage than the neighbouring villages to the cast. The highest acre rates proposed for rice lands were 16s. (Rs. 8) for the villages of the first three dry-crop classes, and 15s. (Rs. 71) for those of the remaining two classes. The entire Government and alienated occupied and unoccupied rice land, according to the revision survey, was 32,553 acres. Of these the Government occupied land was 19,926 acres. Their assessment at the proposed rates gave an average acre rate of 6s. 4sd. (Rs. 3 as. 3vi) against 4s. 1sd. (Rs. 2 as. 1715), the average rate of the rice land under the former settlement. For the garden lands the highest acro rate proposed was £1 10s. (Rs. 15). The entire garden lands were 1968 acres of which 1307 acros were Government occupied land. Their assessment at the proposed rates gave an average acre rate of 13s. 9d. (Rs. 62), against the former average of 12s. 11d. (Rs. 6 as. 71) on an area of 833 acres. The following statement shows the effect of the revision settlement:

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Kod, 1878-79.

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1 III. IV. V. Test .	#1 22 24 4	E E E E E E E E E E E E E E E E E E E	12.2	27.7	11,121 21,123 21,123	12.61	(500 (400 (10°2.1)	11/4) 11/5/4 27/4 27/4			71

The total increase of revenue from the land in occupation is 1876-77 was £5883 (Rs. 58,830) or thirty-nine per cent. In two cases the increase was over 100 per cent. The village of Basriballi was mised 103% per cent from a total of £14 8s, to a total of £90 8s. (Rs. 444 - 904). This increase was chiefly on the watered area, £18 to £40 (Rs. 180-400) a rise of nearly 200 per cent, from the increased valuation of irrigation entirely due to the reservoir being turned to better account than formerly. The second case was the village of Byathanhal which was raised 1402 per cent. Here the rice land recorded at the first settlement was ninety acres with an assessment of £19 (Rs. 190). Now 135 acres of rice land were nesessed at £56 4s. (Rs. 562), which, with the additional water assessment, accounted for the large increase. In two cases the increase of assessment was between 90 and 100 per cent. In Konapur the rise was from E6 Ge. (Rs. 63) to £12 Se. (Rs. 124) or 96'8 per cent; this was chiefly due to the correcting of a former error in area. The second case of increase between 90 and 100 per cent was the village of Basapur where the increase was from £13 16t. to £27 6s. (Rs. 198 - 273) or 97.8. In eleven cases the increase was between sixty and ninety per cent. A considerable area of Government arable land was still waste. The details are:

Kol Ware Land, 1878.

1		Говигр	PLRTPY,	Nervos \$ 2727			
Lind		Arrs	[lerts]	Arra	liental.		
Pryserop Blee Oarden		रतार स्ट्राइ १९२१ इ	Hr. 17,417 27,4 163	Arms 31,711 124 12	Tu 27,743 27,744 27		
Total	μ	25,136	21,121	\$10,02	S7,2-7		

The increase in the total area of unoccupied arable waste land was due to lands formerly classed as unamble being classed as arable. The bulk of the large area of the drycrop arable waste was poor uplands which for long were likely to be held only for grazing. The following statement shows the total area and assessment of the whole survey block of 247 Government villages of the old Kod sub-division:

Kod Land Area and Assessment, 1878-79.

LAND.	FORMER	Stript.	REVISION			
HAND-	Area.	Rental.	Area,	Rental.	Quit-Rent	
Government { Occupied	Acres 172,639 35,131 67,611	Rs. 1,51,033 21,910 75,174	Acres 174,530 34,011 65 670	R4 2,07,861 27,289 1,03,072	Rs. 45,706	
Total	332,057	2,48,203	834,267	3,40,225	45,706	

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On the whole occupied Government land under every head, garden rice and dry crop, the assessment of the former settlement showed an average acre rate of 1s. 9d. (14 as.); under the proposed settlement the average acre rate would be 2s. 4\frac{7}{4}d. (Re. 1 as. 3\frac{1}{6}), an acre increase of 7\frac{7}{4}d. (5\frac{1}{4}as.). The proposed settlement was sauctioned by Government in March 1879.\frac{1}{2} It was introduced into fifty-one villages in 1878-79 and into the remaining 196 villages in 1879-80.

During the ten years before the original survey settlement (1838-48). in 245 Kod villages the tillage area fell from about 58,000 acres in 1838-39 to about 38,000 acres in 1847-48, and collections from about £17,000 to about £10,900 (Rs.1,70,000-Rs.1,09,000). first ten years of the survey lease (1848-1858) the tillage area resefrom about 50,000 acres in 1848-49 to about 121,000 acres in 1857-58, and collections from about £9600 to about £15,700 (Rs. 96,000 -Rs. 1,57,000); during the next ten years (1858 - 1868), the tillage area rose from about 126,000 acres in 1858-59 to about 182,000 acres in 1867-68 and collections from about £16,000 to about £21,200 (Rs. 1,60,000 -Rs. 2,12,000); and during the last ten years (1868-1878) the tillage area varied from about 176,000 acres in 1868-69 to about 166,000 in 1872-73, and collections from about £20,800 to about £19,900 (Rs. 2,08,000 - Rs. 1,99,000). During the four years after the revision settlement (1878-1882), the tillage area fell from about 170,000 acres in 1878-79 to about 165,000 acres in 1881-82, and collections varied from about £25,200 in 1879-80 to about £21,000 in 1881-82 (Rs. 2,52,000 - Rs. 2,10,000). The details are2:

Kod. 245 Villages: Survey Results, 1838 - 1882.

		Tillagr.			WASTE.	•		Out-		Jt dri
Year.	Area.	Rental	Re- mis- sions.	Area.	Rental	Grazing Fees.	Quit Rent.	stand- dings.	Collec- tions.	Ruped
Before	Acres	Re.	Rs.	Acres,	Rs.	Rs.	Re.	Rs.	Ra.	Lbs
Furey. 1629 20 1829 10 1840-41 1841-42 1842-43 1843-44 1844-45 1846-46 1846-47 1844-43	 £8,223 57,200 53,606 £5,312 £2,223 45,212 39,574 87,710 48,949 28,417	01,307 80,076 80,653 90,783 86,707 74,777 61,659 60,594 62,913 62,445	21,004 4982 3073 3248 6641 971 1020 7730 1003	139,6°0 140,671	61,033 62,107 62,120 65,454 72,872 76,727 79,784 81,657	216 1787 1511 754 795 126 293 7231 8159 8150	43,601 59,460 50,359 50,655 48,459 47,291 41,600 80,817 39,003 39,073	1611 2103 2240 2146 1141 4422 456 516 571 87	1, (°), 509 1,43,208 1,33,348 1,34,348 1,24,011 1,10,501 1,05,067 06,484 1,04,040 1,04,040	240

¹ Colonel Anderson, Survey Commissioner, 150 of 14th February 1879, and Gov. Res. 1678 of 27th March 1879, Bom. Gov. Sci. CLX. 1-36, 192-202.

² Bom, Gov. Scl. CLX, 37 - 41.

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Kod, 245 Villages: Survey Results, 1838-1882—continued.

	TILL	AQZ,		Wate					Π
Yean.	Area. Rer	Re- mis. Blong	Ares.	Rental.	Orazing Fees,	Quit- lient.	Out- tand ings,	Collec- tions,	Jeán Rupe Prios
Surrey, 1848-40	Acres n	9. Re	Acres.	Ra,	Rs.	Re	Re.	ne.	Lla
1810-16	07-13 72 77-149 74 77-149 74 77-149 74 75 77-149 75 75 75 75 75 75 75 7	315 GT1 1933 1933 1933 1933 1934 1935 1935 1937 1937 1938	71,000 65,037 60,037 85,577 85,577 85,747 84,765 84,765 84,765 84,765	20,610 16,452 14,140 14,765 14,062 15,761 10,741 10,850 2,873	8548 12,004 11,446 13,783 12,265 12,101 11,474 11,584 9705	81,000 80,000 20,000 21,000 21,100 21	124 P	01,819 05,079 00,720	2000年
1878-76 17 1878-77 17 1878-77 17 1877-78 17	7,100 1,47,5; (0,823 1,78,7 1,048 1,50,18 0,967 1,40,73 1,673 1,60,42	11 11 11	39.834 2 76,202 2 31,884 2 31,170 2	1,076 2,247	0,122 0,122 01-9 07:7	1,524 1,781 11,783		19.181 (0,317 (0,031 (1,031	219827
1880-81	0,672 1,61,88 6,290 2,02,05 6,771 2,00,36 6,850 1,00,38	DC .	11,012 35 15,322 35	,603	1629 4. 5129 41	5,168	10CS 2,1 552 2,5 410 2,6	1,790	

Dhárwár, 1879-80.

In 1879 the settlement of the 184 villages of Dharwar was rovised. Since the 1848-49 settlement the Dharwar villages had been distributed. In 1879 two belonged to Kalghatgi, two to Parasgad in Belgaum, one to Hubli, and 129 to Dharwar. The total area was 207,748 acres.2 The old Dhárwár sub-division formed the

Dháruar Area, 1848 and 1878.

	and alta 15	78.
LAND,	Former burney.	Revision Survey.
Arable Dry-crop Rice Garden Municipal	162,295 12,797 601 31,283	151,070 14,647 086 37,921 2224
Total	208,916	207,748

Considering how much hill and forest land lay in the west of the sub-division the increase in the total area was small. The considerable increase in unarable unassessed to the sub-division of the sub-division that the inclusion of the sub-division that the land was chiefly due to the inclusion of assessed lands in forest reserves. Bom. Gov.

Colonel Anderson, Surv. Comr. 374 of 19th April 1879 and Gov. Res. 2769 et 27th May 1879. Bom. Gov. Sel. CLXI. The details are :

extreme north-west of the collectorate. The Dharwar-Hubli road running north-east and south-west divided it into two very different sections. The country to the north-east was a waving plain with occasional small hills, in general a drycrop tract containing a large proportion of black cotton soil. The land to the south-west was full of hills and forest in the main of red soil, the regular rice country which is locally known as malnád. During the eleven years ending 1878 at Dharwar the rainfall varied from 47.98 to 26.28 and averaged 31.92 inches, and at Mugad it varied from 50.78 to 23.28 and averaged 34.71 inches. The climate varied greatly in different parts of the subdivision. . The east with a certain and fairly regular rainfall was admirably suited to drycrop tillage. As a rule during the month of May a succession of heavy thunderstorms thoroughly soaked the ground and allowed ploughing and other field work to begin in preparation for the regular southwest monsoon in June. In the end of October, after the setting in of the north-east or Madras monsoon, a very heavy fall of rain generally afforded a second chance in case the south-west monsoon happened to fail. In most years the rainfall in May and in October was greater than that of any other two months of the year. From the Belgaum road the rainfall increased with every mile to the west, till, near the western boundary, during the mensoon months it was fully fifty per cent heavier than at Dharwar. In the west the constant succession of hill and dale was very favourable for rice, the drainage of the hill sides keeping the lowlands well supplied with water. The east of the sub-division was in the main a drycrop tract and jvari, wheat, pulse, cotton, and oil seeds were the staple crops. Less than the whole area of cotton soil was given to cotton, as from the nearness of Dhárwár and still more because of the value of its straw as fodderfor cartmen, Indian millet was a better paying crop than cotton. In the west, though Indian millet was still occasionally seen, ragi took its place as a drycrop and rico became the staple. lying rice lands with a sufficient supply of moisture, sugarcane was commonly grown once every three years, and in other years a crop of pulse generally followed the rice. The land was generally well tilled, and, as far as it was available, manure was given first to the rice land and then to the drycrop soil. The garden lands were of comparatively small importance. As in other parts of northern Dhárwár, the areca palm and betel vine gardens of the south

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Dhdrudr,

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Dharrar Rainfall, 1563-1878

			Z/IMIF	101 314116	au, 1363-101	-		
3	KAR.		Dhúra ár	Mugad.	Yran.		Dhirmir	Mugad.
			Inches.	Inches.			Inches.	l .
1869			31-46	23.81	1874	•••	47 99 10 61	42·61 35 78
1817	***	•	29.70 32.24		1875	••	57.02	23.29
1670 1671	•••	•••	27 37	33.00	1577		61.86	33.71
1872	::	."	20 16	31-19	1879	***	39 35	£0.78
1873		÷	26-23	20 33	Average	***	21.07	31 71

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 1870-30.

gave way to sugarcane, fruit trees, and vegetables with a sprinkling of cocor palms. On an average, between 1874 and 1878, 62,521 and or 50:37 per cent of Government occupied land were under carie co Marif crops, and 40,947 acres or 40 65 per cent, were under late to rabi crops. Of the total curvey numbers 10,937 or 72 15 per cent were Government and 4225 or 27:57 per cent were alienated. Gi the Government numbers, 6963 or 45.92 per cent were tilled by the occuprate, that is the men who a names were entered in the Gorers ment books, 127 or 051 per cent were tilled by occurants in rest nership with others, 1742 or 11:49 per cent were tilled by teasits on money rents, and 1210 or 7408 per cent were tilled by tenants ex produce or gram rents. Of the private or index numbers, 1550 ce 10:22 per cent were tilled by the proprietors or is incline, 68 to O 14 per cent by proprietors in partnership with others, 2078 er 1371 per cent were tilled by tenants for a money rent, and 571 ce 350 per cont by tenants for a produce or grain rest. Of the remaining numbers 441 or 2:21 per cent were waste, and 4% or 2:33 per cent were a marapel or unarable numbers. Taking the two classes of land together these returns give 651 per cent tilled by the per 62 holding directly under Government and Bill per cent by others The large area of tenent-tilled land, about eleven per cent alore the average, was probably due to the neighbourhood of Dhárnár some of whose traders and gentry held large areas of land. The conditions in this Dharwar sub-division differed from the conditions in most parts of the district. The two large towns of Disense and Hubb were a peculiar feature, and scattered through the population was a large trading class anxious to own land. Considering that nearly half of the people 16:19 per cent mere traders or craftsmen it was remarkable that a larger proportion of the land had not passed from the field working classes. The land in this subdivision possessed an exceedingly high value both for sale and as security for loans. As was to be expected in a country where the trading class not strong, and where a strong trading spirit percaled the whole population, the cases of sales mortgages and leases of land recorded at the registration office were very numerous. The terms of sale mortgage and lease varied much. In sales ten to twenty times the survey assessment was a common rate and far higher rates were frequently recorded. Here as everywhere the thirty years of the survey settlement had seen a great change in communications. In 1819 there was but one made road in the aub-division that ran from Hubli to Belgaum. It presed through the town of Dharwar and supplied the only communication by road with the coast by Belgaum

The details are: Kharif, rico 11,150 acres or 0.65 per cent, jouri 51,350 or 29.71 per cent, bdjri 285 or 0.25 per cent, in 4087 or 3.64 per cent, rwg 1083 or 0.92 per cent, ill 130 or 0.11 per cent, rulo 1821 or 1.25 per cent, castar aced 1419 or 1.25 per cent, dubbi 1301 or 1.13 per cent, ubidi 25 or 0.92 per cent, dubbi 1301 or 1.13 per cent, did 25 or 0.92 per cent, tolatec 2261 or 0.25 per cent, miscellaneous 12,651 or 10.97 per cent, total (5,691 or 59.37 per cent, Robi, American cotton 833 or 0.74 per cent, country totton 10,022 or 870 per cent, gram 2153 or 2.12 per cent, wheat 8310 or 7.66 per cent, sugarcane 153 or 0.14 per cent, leathful 1532 or 1.33 per cent, inseed 56 or 0.07 per cent, coconnut pluntain and other fruits 21 or 0.02 per cent, miscellaneous 850 or 0.74 per cent, waste and fallow 22,096 or 19.12 per cent, total 40,047 or 40.63 per cent. Hom. Gov. Sci. CLXI. 68.

and the old Ram pass which in many parts had a slope probably fully one in six. Soon after (1848-49) measures were taken to open communications with Kumta. In 1879 there were three ports on the coast immediately below Dharwar accessible by good passes and roads, Kumta by the Arbail and Devimani passes, Kárwár by the Árbail pass, and Goa by the Tinai pass, a line of little trade. Local cross roads had also been made in every direction in which the country tracks were not easily passable to carts. The sub-division was well supplied with markets. Dharwar with over 23,000 people was an exceedingly good market and other second class towns were scattered at convenient distances. Hubli one of the largest trading towns in the Bombay Karnatak was only twelve miles from Dharwar and only six miles from the southeastern villages of the subdivision. The local manufactures were of no great consequence, 733 looms were employed in weaving cotton cloth and blankets. Except for show purposes local hand-woven cotton cloth held its own with steam-woven Bombay and English cloth. Produce prices between 1848 and 1878 showed that during the ten years ending 1857 jvári rupee prices averaged 122 pounds, in the ten years ending 1867 the average rose to 60 pounds, in the ten years ending 1877 to 52 pounds, and in 1878 the price was 20 pounds the rupee. The details are:

D	iár	var Gr	ain Rup	ee Price	s, 1848	- 1878.	
YEAR.		Jodri.	Cleaned Rice	Wheat.	Náchni.	Gram.	Tur.
1548 - 1857 1858 - 1807 1868 - 1877 1878		122 60 52	Pounds. 64 30 26 16	Pounds. 98 46 30 10	Pounds 136 70 63 26	Pounds. 60 30 22 14	Pounds 82 42 30 22

The high American war prices of 1862-1865 were reached, and in a few cases slightly exceeded, during the famine year of 1877. Leaving out 1877 the average of the ten years ending 1878 showed a rise, during the thirty years of the survey lease, in the price of cereals of 107 to 206 per cent and in pulses of 173 per cent. Compared with those of the ten years ending 1857 the average produce prices of the ten years ending 1877 were considerably over 100 per cent higher.

The Dhárwár sub-division differed from several of the lately revised sub-divisions because in 1848 at the time of the former settlement and for a long time before, it had an ample population, contained at least one large town with other towns near, and had a military cantonment. So large a non-producing population ensured a good demand for all articles of every-day use. In spite of these advantages in 1847-48 the year before the introduction of the first settlement, of the arable land only 64,044 acres were occupied, and 58,217 acres were waste. The unoccupied arable area fell to 8060 acres in 1856-57 and to 4758 acres in 1878. In 1879 most of the

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Revision Survey. Dháruár, 1879-80.

¹ The detailed yearly tillage and revenue statement given below shows for 1877-78 instead of 4758 acres 13,818 acres of unoccupied arable land. The explanation is that much of the 13,818 acres had from time to time been included in forest reserves which the revision survey excludes from the assessable area. Bom. Gov. Sel. CLXI. 10.

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The B. Dhdriedr,
1879-80.

arable waste was in the west where was a considerable area of poor bil land. Remissions, which were very large before the first settlement. for twenty years had practically ceased, and, except during and after the 1876 famine, for twenty-five years outstandings had been practically unknown. During the ten years ending 1847-48 collections ranged from £12,000 to £13,000 (Rs. 1,20,000-Rs. 1,30,000), and in the two years ending 1817-48 they were £14,300 and £15,200 (Rs. 1,43,000 and Rs. 1,52,000). In 1847-48 the first year of the settlement £9027 (Rs. 90,270) only were collected. From this the revenue stendily rose to £17,786 (Rs. 1,77,860) in 1865-64. After 1865 came a slight fall. Still in the ten years ending 1878-79 the collections from Government occupied land ranged between £13,300 and £13,400 (Rs. 1,33,000 and Rs. 1,31,000). The two famine years 1876-77 and 1877-78 were years of considerable pressure on the poorer classes. In 1876-77 in ninety-nine villages 1412 notices were issued and sixteen cases of distraint occurred. In 1877-78 in ninety-one villages 996 notices were issued and there were thirty-seven distraints. Considering that many of the villages were on the frontier and that much of the land was held by people who lived beyond the frontier, these numbers for a year of such exceedingly high prices were not excessive. The corresponding figures for 1875-76, which may be considered a normal year, were that in sixty-four villages 228 notices were issued and four distraints were made. The following statement shows the average tiliage and revenue in 133 villages of this old Dharwar sub-division during each period of ten years between 1838 and 1878:

Dharwar Tillage and Land Revenue, 1838-1878.

Year.	Govern- ment Occupied Land.	Govern- ment Arable Waste,	Collec- tions on Govern- ment Land.	Remis- sions.	Total Coi lections.	Out- etand- logs-
Before Survey.	Acres.	Acres.	Rs.	Rs.	Re.	Hs.
1838-1815	67,827	60,479	96,464	16,664	1,27,220	329
Surrey.		·			1	
1848 - 1858 1859 - 1869	440'014	21,226 7254	1,15,719 18,883	229 26	1,46,325 1,74,196	0488 3
18GS-1878	940,004	12,626	1,33,976	23	1,69,410	618

During the thirty years ending 1878 flat roofed and tiled houses increased from 7589 to 14,708 or 93'8 per cent; carts from 2188 to 3181 or 46'44 per cent; wells and waterlifts or budkis from 845 to 1172 or 38'7 per cent; and ponds from 175 to 200 or 14'29 per cent. Population showed a decrease from 84,872 to 79,414 or 6'43 per cent; thatched houses from 8465 to 4046 or 52'2 per cent; farm cattle from 22,646 to 15,920 or 29'7 per cent; cows and buffaloss from 42,333 to 20,073 or 52'58 per cent; sheep and goats from 12,081 to 4865 or 59'73 per cent; and horses from 1299 to 519 or 60 per cent. In 1848 the population was 261'5 to the square mile a very high rate for those times. In 1878 it was 244'7 to the square mile. The decrease of 6½ per cent in the population was ascribed to a bad type of fever which had been prevalent in these

villages since 1860. Except by forcing craftsmen and labourers to leave their homes in search of work it was believed that the decrease was not due to the 1876 and 1877 famine. The increase of 93 per cent in flat roofed and tiled and the decrease of 52 per cent in thatched houses showed what an advance the bulk of the people had made in comfort. The decrease in cattle was more apparent than real. The reckoning was made during the fair season when large numbers of cattle were absent from their villages, some employed in the carrying trade and others sent to the western forests to graze. The increase of 46 per cent in carts, was a proof that the cattle power of the sub-division had been materially strengthened. A decrease in other cattle had been caused by the increased cost of grazing and fodder. Here as every where in Dhárwár, sheep and goats showed a great decrease. The fall in the number of horses and ponies, according to Colonel Anderson, was due to the number of roads which made the well-to-do travel in vehicles instead of on horseback. The increase of wells from 845 to 1172 was fair, considering the thickness of the waterless surface layer. The rise from 175 to 200 ponds was due to the repair of ponds which had been breached in 1848. Especially in the centre and eastern or black plains, the condition of the people was exceedingly good. The western villages were not so well off though compared with their state in 1848 the advance in the western villages had probably been greater than in the centre and east.2

As in Bankapur lands were remeasured with the object of turning every separately recognized occupancy into a separate survey number; of, as far as possible, separating alienated from Government land; and of dividing unwieldy survey numbers into moderate and manageable With these objects the local survey numbers had been raised from 11,760 to 15,102. The total area was 207,748 acres against 206,916 acres according to the former survey. Though the general result of the two surveys was so close, considerable differences were found in individual survey numbers. No less than 7½ per cent of the measurements differed by more than five per cent from the areas of the old survey. As in other parts of Dhárwár the reclassing was only partial. Only a small percentage of the better drycrop soils was reclassed and a larger percentage of the poorer soils enough to enable the survey officers to judge of the standard of tho former classing, and to ascertain what adjustment was necessary to bring the former classing to the revision standard. The revision standard differed from the former standard chiefly by placing a greater difference between the better and the poorer soils. If the result of the area reclassed in the first instance proved unsatisfactory, a further area or if necessary the whole village was reclassed. As in other parts of the district, changes in the condition of the reservoirs made a reclassing of water rates necessary. Considering the improvement in communications and the rise of about 100 per

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¹ Colonel Anderson (Bom. Gov. Sel. CLXI. 7) thought migration to Bidi in Belgaum and to Kanara had helped the decrease. In this view Mr. Reid the Rev. Comr. (949, 17th May 1879, Bom. Gov. Sel. CLXI. 84) did not agree.

² Bom. Gov. Sel. CLXI. 12.

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The Bi Dhdriedr, 1879-80.

cent in produce prices, the landholders could fairly be called on to pay a considerably enhanced rental. The 134 villages were arranged in six classes with highest drycrop acre rates varying from 6s. to 2s. 6d. (Rs. 3-11). The villages of the fifth and sixth classes had gained more than any other part of the sub-division by the In former times the western villages were making of roads. without a single mile of made road and were almost entirely cut of from any leading market. In the first class, with a highest dry-crop acre rate of Gs. (Rs. 3), fourteen villages were placed comprising the town of Dharwar and the villages round it. In the second class, with a highest dry crop acre rate of 5s. 3d. (Rs. 2f), were fifty-one villages including the whole eastern half of the sub-division. In the third class, with a highest dry-crop acre rate of 4s. 9d. (Rs. 21), were twenty-four villages close to the west of the Belgaum road and to the west of the second class and also containing three villages somewhat far to the east. In the fourth class, with a highest dry crop acre rate of 4s. (Rs. 2) were nineteen villages to the west of the third class and with a climate less favourable for dry crops. In the fifth class, with a highest drycrop acre rate of 2s. 3d. (Rs. 11), were eighteen villages still to the west of the fourth class with a climate still less favourable for dry crops. In the sixth class, with a highest dry crop acre rate of 2s. 6d. (Rs. 11), were eight villages on the extreme western border of the sub-division in a climate which was badly suited for dry crop tillage. Under the 1848 settlement the rice lands which measured 12,797 acres were assessed at highest acre rates of 16s. (Rs. 8) in the villages of the first five classes, and at 14s. (Rs. 7) in the villages of the two remaining classes. At that time the occupied area of this land was 8281 acres which gave an average acre rate of 5s. 21d. (Rs. 2 as. 93). Under the revision survey the rice land measured 14,647 acres for which the highest acre rates proposed were 18s. (Rs. 9) in villages of the first and second classes, 16s. (Rs. 8) in villages of the third and fourth classes, and 15s. (Rs. 71) in villages of the fifth and sixth classes. The occupied area of the rice land was 10,214 acres which at the proposed rates gave an average acre rate of 5s. 6ad. (Rs. 2 as. 12a). Under the 1848 settlement 561 acres were recorded as garden land of which 359 acres belonged to Government. Under the revision survey the total garden land was 986 acres of which 658 acres were Government. Most of it was watered from reservoirs and a small portion from stream channels. None of the garden land was specially rich. It did not materially differ from the best rice land, sugarcane being generally the best crop grown. For this garden land the highest acrerate proposed was 18s (Rs. 9). The average acre rate was estimated at 8s. 94d. (Rs. 4 as. 63) against the old average of 7s. 94d. (Rs. 3 as. 144). Lands watered from wells were treated in the manner directed by Government Resolution 1028 of 25th February 1874. Those under wells existing at the time of the first settlement were assessed within the highest drycrop rate, and those lands which were under wells constructed since the last settlement were assessed at the simple dry crop rate. The lands under wells which drew their water from soakage from Government reservoirs were as usual assessed at rates not exceeding double the ordinary dry crop rate. The effect of the

revised settlement was to raise the assessment 39.8 per cent. The details are:

Dharwar Revision Settlement, 1879-80.

	Former Survey.		Ī	Revision Server.										
CLASS Villages			nment	Gover Occupie	nment ed Land.	Unoc	ninent enpicd hd.		otal.	In- crease	Highest Acre Rate.			
_				Area.	Rental.	Arca,	Rental.	Arca	Ren- tal.	Arca	Rental	l'er cent	Dr3 -	Rice.
I III IV V VI			14 51 24 19 18 8	Acres, 13,317 63,012 10,663 12,654 14,321 2778	R4. 20,499 70,003 10,807 14,089 11,709 2233	Acres 13,419 52,023 19,469 12,874 14,073 2305	52,722 96,731	Acres 48 654 677 1148 1745 566	Rs. 57 355 431 731 1445 517	Acres, 13,497 62,632 20,0+6 14,022 16,418 3371	Rs. 32,779 97,034 18,177 17,680 17,705 3512	59-7 78-8 40-1 30-3 39-8 31-2	R 3 224	E. 9 9 8 8 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18
To	tal		134	115,703	1,39,343	115.209	1.93.400	4758	3539	120.020	1,96,939	29-8		

The estimated increase of revenue resulting from the revision was £5506 (Rs. 55,060) or 39.8 per cent. This increase was a little less than what was obtained in the neighbouring sub-divisions in the north and centre of the district which had been settled three and four years before. This was not due to a lower revision standard but because the former Dhárwár rates were higher than those in neighbouring sub-divisions. There was a singular absence of cases of remarkable increase of assessment on individual villages. In the first class two villages had been raised between 70 and 80 per cent. Dandikop a village with good soil close to the town of Dhárwár was raised 72 per cent and Bagtaláv, which was not a village but a parcel of about seven acres close to Dharwar, was raised 78.6 per cent. Six of the seven acres were garden land under a very good pond and the rental was raised from £2 16s. to £5 (Rs. 28-50) in consequence of a higher valuation of the water-supply. The only other cases of over 70 per cent increase were two villages in the sixth class. In both these villages there was a very large increase of rice land. Dabinkodla which was raised 129 per cent, had formerly but one acre assessed at 4s. (Rs. 2) while at the revision it had fourteen acres assessed at C1 4s. (Rs. 42), and the whole new rental of the occupied lands, 53 acres, of the village was £7 2s. (Rs. 71) against £3 2s. (Rs. 31) on the same area under the 1848 settlement. In Dhopenhatti which was raised 70.2 per cent or from £18 2s. (Rs. 181) on 298 acres to £30 16s. (Rs. 308) on 324 acres, there were formerly sixteen acres of rice land assessed at £3 18s. (Rs. 39), while according to the revision survey there were forty-seven neres assessed at £11 8s. (Rs. 114). The higher rates in these villages were due to increased water assessment. The 4758 acres of arable waste assessed under the revision settlement at £354 (Rs. 3540) were as a rule scattered in small areas over different villages. The greatest part of the waste was in the fourth and fifth classes and mostly comprised hill lands which were more suited for grazing than for tillage. Near Dharwar much land was permanently occupied and used solely for grazing. In the more remote parts, where the demand for land was not so great, people wanting grazing lands proferred to take their chance at the yearly auction. To make

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REVISION SURVEY.

Dhárwar, 1879-80, it easier to take it up, all waste rice land was broken into small survey numbers. The following statement shows the total area and the assessment of the sub-division under every head:

Dhárwar Survey Settlements, 1849 and 1879.

Ţ.,			-	FORMER	Sorvey.	Rev	VAT.			
I.4:	aD.		_	Area.	Rental.	Area,	Rental	Quit- rent.		
	40.	14.3		Acres.	Rs. 1,38,343	Acres.	Rs.	Rs.		
Government.	≀	-								
	(U	necuph	ed.	13,818	7574		3539			
Alienated	448	***	***	40,012	65,929	47,577	03,479	81,233		
Unarablo		•••	•11	31,263		37,921				
Municipal	•"•	186	.,		H 1	2224	***			
		Total	••	206,916	2,11,840	207,748	2,90,418	34,238		

The great fall in the area of arable and the corresponding rise in the area of unarable waste was due to the change under which assessed lands included in forests were entered in the revision survey as unarable instead of as arable. Under the revision survey, on the whole Government occupied land of every description, garden rice and drycrop, the average acre assessment was raised from 2s. $4\frac{1}{4}d$. to 3s. $4\frac{1}{4}d$. (Re. 1 as. $3\frac{1}{6}$ to Re. 1 as. $10\frac{5}{6}$) or an acre increase of $11\frac{1}{4}d$. ($7\frac{3}{4}$ as.) The proposed settlement was sanctioned by Government in May 1879.

During the ten years before the original survey settlement (1898-1848), the tillage area varied from about 64,000 acres in 1847-48 to about 50,000 acres in 1844-45, and collections from about £15,200 (Rs. 1,52,000) in 1847-48 to about £9400 (Rs. 94,000) in 1838-39. During the first ten years of the survey lease (1848-1858), the tillage area rose from about 77,000 acres in 1848-49 to about 114,000 sores in 1857-58, and collections from about £9000 to about £15,900 (Rs. 90,000-Rs. 1,59,000); during the next ten years (1858-1868), the tillage area varied from about 119,000 acres in 1861-62 to about 115,000 acres in 1858-59 and collections from about £17,800 (Rs. 1,78,000) in 1865-66 to about £16,200 (Rs. 1,62,000) in 1858-59; and during the eleven years ending 1878-79, the tillage area varied from about 115,000 acres in 1878-79 to about 112,000 acres in 1876-77 and collections from about £17,300 (Rs. 1,73,000) in 1872-73 to about £16,300 (Rs. 1,63,000) in 1876-77. During the three years after the revision settlement, the tillage area steadily fell from about 153,000 acres in 1879-80 to about 112,000 in 1881-82, and collections from about £23,200 to about £19.000 (Rs. 2,32,000-Rs. 1,90,000). The details are2:

Col. Anderson, Survey Comr. 274 of 19th April 1879 and Gov. Res. 2769 of 27th May 1879. Bom. Gov. Sel. CLXI.
 Bom. Gov. Sel. CLXI. 20-22, 67.

Dharwar, 133 Villages: Survey Results, 1838 - 1882.

Defore Inches Servey I		Rain		TILLAGE			Waste,		Quit	Out-	Collec-	Ji tri
Surrey Inche	YEAR.		Arca,	t .	Remis.	Arca.	Rental.	Graz- ing Pees.		stand- ngs.	Conce-	Prices
1859-40	Survey.	Inches	Acres	Rs.	Rs.	Acres	Re.	R,	Rs.	Re.	Rs	Lbs
1810 41	1835 CD		56,604 02,535	1,00 010		B1,392			25,270		93,760	78 102
1811-42			60,010	1 10 001	10,101	80,001	40,040	1040	00000	1 43	1 00 100	120
1812-44 58,653 1,15,673 15,972 00,351 61,051 415 29,081 120 1,20,100 1814-45 50,852 1,02,551 15,970 62,658 83,049 148 29,370 1203 1,14,845 1815-46 51,118 09,041 0100 63,455 7,090 0108 27,703 011,14,845 1815-47 64,044 1,23,670 0562 00,613 6300 23,602 0407 1,47,455 1847-48 64,044 1,23,670 0560 08,217 49,204 6292 23,452 332 1,52,392 1818-40 70,010 01,848 216 37,415 25,200 6701 23,671 30,740 00,266 1880-50 70,201 1,08,518 83 20,105 17,733 5761 22,823 33,633 1,07,280 1851-52 02,460 1,10,665 373 23,076 17,635 7640 22,823 33,633 1,07,280 1851-52 02,460 1,10,655 373 23,076 17,635 7640 22,823 33,633 1,07,280 1851-52 02,447 1,13,250 120 24,074 10,633 7017 22,750 4,4415 1833-54 09,447 1,13,603 101 21,752 10,044 7624 70,550 30 1,47,005 1853-55 01,682 1,14,602 275 21,442 1,544 0244 22,751 1,44,415 1833-55 01,683 1,09,112 351 14,891 5271 4718 26,401 41,63,700 1857-59 114,261 31,1413 20 7461 3203 2000 21,734 116,570 115,570 125,602 20 7661 379 2047 20,750 31,63,700 116,570 126,602 20 7661 379 2047 20,750 166,602 116,761 133,603 20 62,903 24,734 22,003 1,63,605 166,606 117,161 135,514 21 6753 2341 22,003 1,63,605 166,606 117,161 135,514 21 6753 2341 22,003 1,750 3 1	1			1 91 976	10,037					1 20		102
1813-41	12010 10			1 13 603	16,103	60.751			23 020	120	1 04 500	123
1544-45			F3 C50	1 00 554		00,551			20,001	130		iii
1615-46			ro oce	00 700	10,010	62,000		, 149	20,3,0		1.13.111	123
Starty S			60,203	20,120		60,237	17,010		50,310	1203	1,11,012	
Surry	1					69,435	10,020		27,703	915	1,22,601	96
Survey.			01.007	12,10,103		00,072			23,602	407	1,41,455	109
1840 50		•••	01,014	1,23,60	0563	58,217	40,201	6292	23,432	332	1,52,392	111
1840 50	1849-40		76 010	ot ste	210	97 415	95 900	6701	02 074	20 740	00 000	120
1851-52 02,447 1,13,260 120 24,071 10,053 7017 22,700 11851-52 02,447 1,13,260 120 120 24,071 10,053 7017 22,700 118,055 101 21,752 10,040 42,4 22,751 118,351 01,040 11,13,055 101 21,752 10,040 40,4 76,24 22,751 118,351 09,070 11,13,055 104 21,752 10,049 4,76,4 20,550 80 14,47,065 118,555 6 104,040 11,250 11,2	1849 50		80 976	11.09.518	90	01,110	17 500		91 197	30,140		120
1851-52				1 10 605			11,100	0101	00 000	92 600	1,11,000	144
1802 63			02,417	1 13 000		23,070	11,655		22,023	20,003	1,01,220	148
1853 54			01,489	1 14 643	075		10,003		22,100			110
1846 67			03 601	228 91 1	100	04.769	10,440		00 650		1 47 005	140
1855 56 1103.08 120.112 S31 14.891 S271 4718 20.401 4 1.60.379 1850-57 118.93 1.79.077 21 6000 4442 3320 25.800 461 1.65.705 1 1850-57 114.483 1.31.413 20 7461 20.323 20.00 25.800 461 1.65.705 1 1857-59 114.483 1.31.413 20 7461 20.323 20.00 25.800 461 1.65.705 1 1859 60 116.704 1.33.603 20 62.00 20.0070 1.60.027 1 18.90 1.33.603 20 62.00 27.90 2.411 20.002 1.60.027 1 1860-62 118.314 1.35.703 20 62.00 27.50 2.411 20.002 1.60.107 1860-62 117.624 1.35.514 21 6735 3423 4812 23.605 1.60.179 1863-62 117.624 1.35.514 21 6735 3423 4812 23.605 1.60.179 1863-66 117.517 1.35.516 20 6790 375 6700 20.703 27.60.05 116.60 117.517 1.35.516 20 6790 375 6700 20.703 27 1.60.057 1864 65 117.303 1.33.475 27 7630 20.755 6700 20.703 27.50 18.60-67 115.83 1.34.970 63 6510 4548 7653 25.111 1.77.605 1863-67 115.88 1.34.772 21 6917 4740 6011 32.510 1.77.605 1863-67 116.88 1.34.772 21 6917 4740 6011 32.510 1.77.605 1863-67 116.88 1.34.970 20 9144 6633 6311 32.005 1.77.7.605 1863-67 116.88 1.34.900 20 9144 6633 6311 32.005 1.77.605 1850-70 20 70 113.452 1.33.418 21 11.754 6507 3703 32.505 1.77.146 1850 70 20 70 113.452 1.33.418 21 11.754 6507 3703 32.505 1.60.89 1850 77 20 37 113.001 1.35.273 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.273 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35.973 12.200 6747 6760 00.107 1.70.600 1857 74 20 37 113.001 1.35	1654 65		0.000	1 10 705	600		10,015			עפּ	11,003	92
155-55 114,48 131,445 20 7461 202 2320 25,600 461 1,65,705 1,55,755 115,755 1,32,632 20 7461 202 200 21,731 1,65,672 1,55,675			100 400	1 00 110	621	21,143	12,015			!	1.01,021	76
1857-58 114,498 131,418 20 7461 2008 2000 21,731 1.58,622 1.58,570 1.32,632 20 7460 3791 2017 20,703 1.69,672 1.89,000 110,704 1,35,627 21 6323 8342 2550 20,703 1,64,455 1870-01 118,714 1,35,673 20 62-0 2759 2-41 29,002 1,67,141 162 64 117,621 1,35,574 21 6783 3323 4812 22,665 1,67,141 162 64 117,171 1,35,576 20 6790 3772 6450 29,818 27 1,69,950 1436 65 117,171 1,35,576 20 6790 3772 6450 29,018 27 1,69,950 1463 65 117,171 1,35,475 27 7620 3775 6100 20,172 27 1,69,950 1,69,485 1,76,957 1646 65 117,160 1,35,475 27 7620 3775 6100 20,172 27 1,75,05 1,60,677 115,958 1,34,772 21 5917 4740 5011 22,510 1,77,675 1,60,677 115,958 1,34,772 21 5917 4740 5011 22,510 1,77,675 1,60,677 115,958 1,34,772 21 5917 4618 33,135 1,71,164 1,71,165 1,71,165	1650.57		119 003		631	14,671			20,101		1,00,377	
1859 60 116,167 1,35,687 20 7466 379 2047 20,703 1,63,072 1,63,465 1,60-01 118,019 1,33,003 20 62-0 2759 2-14 22,003 1,60,179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-179 1,60-02 1,60-02 1,60-179 1,60-02 1,60			110,200	1, 10,0 1	21			3320	20,800	401	1,05,107	174 98
1809 00	1568 70		115,000	1,31,413	20			2000	21,731		1,65,623	100
1807 62			110,007	1,02,002	עמ	7480			20,713		1,62,002	100
1807 62	11.00.00		110,704	1,53,651	21	6328	8342	2550	20,793		1,63,455	
1802 63			118,319	1,35,093	20			2011		•	1,00,179	84
1463 64 117,617 [135,676] 20 0 0700 3472 [6150 27]038 27 [160,657] 1804 65 117,130 [135,455] 27 7 753 9107 30.172 [1,75,05] 1805-66 111,7130 [135,455] 27 7 753 9107 30.172 [1,75,05] 1807-66 115,988 [134,772] 21 8917 4740 8011 22,610 [1,75,05] 1807-65 115,840 [1,38,800] 20 9144 6033 [6311 22,623 [1,71,65] 1802 70 27 0 111,657 [1,38,800] 20 9144 6033 [6311 22,625 [1,71,65] 1802 70 27 0 111,657 [1,38,800] 20 9144 6033 [6311 22,625 [1,71,65] 1802 70 27 0 111,652 [1,33,602] 28 10,444 6073 [631 30,625 [1,71,65] 1802 70 27 0 111,652 [1,33,62] 12,100 0700 [4811 20,623 [1,71,65] 1870-77 20 37 113,000 [1,33,222 12,100 0700 [4811 20,623 [1,71,65] 1871-77 20 37 113,000 [1,38,803] 12,200 0747 6760 20,107 170,070 1872 73 5041 113,452 [1,38,801] 12,200 0747 6760 20,107 170,070 1872 73 5041 113,152 [1,38,801] 12,724 705 6400 29,754 [1,70,113 1875 75 2004 113,140 [1,34,003] 12,724 705 6400 29,754 [1,70,113 1876 77 2004 113,140 [1,34,03] 12,600 090 4788 20,900 1112 [1,63,307 1876 77 2005 112,141 [1,34,403] 12,600 090 4788 20,900 1112 [1,63,307 1876 77 2005 113,140 [1,34,03] 13,600 7674 1005 20,900 1112 [1,63,307 1876 77 2005 113,140 [1,34,03] 13,600 77 13,784 7012 634 34,015 885 1,70,737 Revenue.	1201-02		118,714	1,35,113	21		2507			1	1,67,141	60
1876 5 116,816 (1,24,500) 29 9144 6030 6311 92,025 1,71,122 1893 67 127,122 1893 67 127 1893 67 1893 77 4613 33,059 1,771,126 1893 77 4613 33,059 1,771,126 1895 77 4613 33,059 1,771,126 1895 77 4613 33,059 1,771,126 1895 77 4613 33,059 1,771,126 1895 77 4613 33,059 1,771,126 1895 77 47 47 47 1895 1895 18,051 18			117,621	1,35,514	21		3323			• 1	1,68,950	44
1876 5 116,816 (1,24,500) 29 9144 6030 6311 92,025 1,71,122 1893 67 127,122 1893 67 127 1893 67 1893 77 4613 33,059 1,71,146 1895 77 127 1895 13,059 1,33,438 21 11,764 6507 3703 32,639 1,669,489 1857 77 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 72 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 73 5076 133,135 1,33,233 21 12,100 0747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,133 21 12,230 6747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,131 21,230 6747 6740 30,107 1,72,600 1857 37 5081 113,140 13,4,103 12,231 7033 6140 29,250 1,669,501 1857 37 5081 113,140 13,4,103 12,230 7074 1857 37 5081 113,140 13,340 1,34,033 12,000 070 4763 29,000 1112 1,163,137 1857 77 30 35 114,070 1,50,073 13,784 7312 034 34,015 885 1,70,737 Rection			117,617	1,35,670	20		3472		27,018	27	1,60,057	20 28 22 62
1876 5 116,816 (1,24,500) 29 9144 6030 6311 92,025 1,71,122 1893 67 127,122 1893 67 127 1893 67 1893 77 4613 33,059 1,71,146 1895 77 127 1895 13,059 1,33,438 21 11,764 6507 3703 32,639 1,669,489 1857 77 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 72 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 73 5076 133,135 1,33,233 21 12,100 0747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,133 21 12,230 6747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,131 21,230 6747 6740 30,107 1,72,600 1857 37 5081 113,140 13,4,103 12,231 7033 6140 29,250 1,669,501 1857 37 5081 113,140 13,4,103 12,230 7074 1857 37 5081 113,140 13,340 1,34,033 12,000 070 4763 29,000 1112 1,163,137 1857 77 30 35 114,070 1,50,073 13,784 7312 034 34,015 885 1,70,737 Rection	10.00.00	***	117,160		27				30,172		1,75,0 3	28
1876 5 116,816 (1,24,500) 29 9144 6030 6311 92,025 1,71,122 1893 67 127,122 1893 67 127 1893 67 1893 77 4613 33,059 1,71,146 1895 77 127 1895 13,059 1,33,438 21 11,764 6507 3703 32,639 1,669,489 1857 77 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 72 20 37 113,001 1,33,233 21 12,101 0700 4831 30,630 1,669,489 1857 73 5076 133,135 1,33,233 21 12,100 0747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,133 21 12,230 6747 6740 30,107 1,70,070 1857 37 5076 133,135 1,33,131 21,230 6747 6740 30,107 1,72,600 1857 37 5081 113,140 13,4,103 12,231 7033 6140 29,250 1,669,501 1857 37 5081 113,140 13,4,103 12,230 7074 1857 37 5081 113,140 13,340 1,34,033 12,000 070 4763 29,000 1112 1,163,137 1857 77 30 35 114,070 1,50,073 13,784 7312 034 34,015 885 1,70,737 Rection			116,533	1,31,451	63			7855	35,111		1,77,865	22 [
18/9 60 31-40 114,627 1.33,000 28 10,444 6073 4643 33,000 1,60,80 1870 71 22 70 113,452 1.33,418 21 11,754 6507 3703 2,680 1,60,80 1870 71 22 37 113,001 1,33,222 12,100 0700 4881 32,630 1,60,180 1871 72 20 37 113,001 1,33,223 12,230 6747 6760 30,197 1.10,690 1872 73 20-16 113,165 1,33,851 12,840 716 6001 29,784 1,72,500 1873 74 24-29 113,756 1,31,011 12,754 7055 6400 29,784 1,72,500 1874 74 779 133,100 1,34,003 4 12,721 7013 6440 29,784 1,72,101 1874 75 4779 133,100 1,34,003 4 12,721 7013 6440 29,623 16,68,637 1875 77 22-05 112,214 1,33,410 181 13,809 7574 1015 29,000 1112,146 1,67,351 1875 77 23 070 142,744 1,33,757 13 818 1574 499 31,112 4014 1,67,351 1876 70 30 35 114,070 1,80,073 13,784 7312 634 34,015 885 1,70,737 Revenon			115,959	1,34,772	21						1,75,275	62
18/0 70 29 70 113/452 [1.33/418] 21 11.764 6507 8703 22.683 [1.60.483 1570 7] 23 24 115,009 [1.33/418] 21 11.764 6507 8703 22.683 [1.60.483 1570 7] 25 24 115,009 [1.33/478] 21 12.10 6700 4831 20,600 [1.70.709 1571 7] 25 27 113/601 [1.39/73] 21 12/20 6704 6700 20,107 [1.70.709 1573 74 20-22] 118,776 [1.34,011] 21 12/20 6704 6700 20,107 [1.70.709 1573 74 20-22] 118,776 [1.34,011] 21 12/21 7013 6149 28,200 [1.70.709 1573 74 20-61] 113,740 [1.34,003] 21 12,721 7013 6149 28,200 [1.60.307 1573 75 20-61] 113,740 [1.34,003] 21 12,721 7013 6149 28,200 [1.60.307 1573 75 20-61] 113,740 [1.34,003] 21 13,754 [1.70.709] 4708 29,200 [1.60.307 1573 75 20-61] 21 12,721 [1.50.407 1573 75 20-61] 21 12,721 [1.50.407 1573 75 20-61] 21 12,731 [1.50.407 1573 7			110,840	11,81,600	20		6039		32,025		1,72,122	84
1870 771 32 24 118,060 1,33,275 12,161 0700 4851 30,160 1,70,070 1872 73 29.37 118,061 1,35,275 12,810 0747 0760 20,107 170,070 1872 73 29.40 7126 8961 72,764 1,72,100 1873 74 29.49 118,775 1,81,011 12,764 7055 6400 29.754 1,72,100 1874 74 795 13,100 1,84,003 4 2,721 7013 6140 29.623 1,68,967 1875 75 30.961 118,140 1,84,033 4 2,721 7013 6140 29.623 1,68,967 1875 77 22.90 112,140 1,84,033 12,010 0700 4868 29,000 1112 1,63,167 1876 77 22.90 12,244 1,33,410 1871 78 1877 78 31.70 114,743 1,30,757 18818 1574 679 81,112 4014 1,67,854 1876 70 33.35 114,070 1,80,973 13,784 7312 634 34,015 885 1,70,737 8447 847 847 847 847 847 847 847 847 84		21.40	114,657	1,33,000	28	10,444						50
1571-72 29.37 113,001 1,35,273 12,230 0747 0760 20,137 1,70,709 1,870,709 1,871,705 1,871,	1520 10	×1 10	113,452	1.33,415	21	11,764					1,69,489	44
1872 73	11870 71 .	32 54	113,059	1,33,252	***	12,167		4351	20,603		1,69,125	03
1873 74 29-29 118,275 1,81,011	1571-72		113,001	[1,33,273]		12,236	6747		30,197		1.70,030	39
1875 70 20-01 113,140 11,34,033 12,010 0000 4768 20,000 1112 1,63,077 1876-77 22-0 112,214 1,33,410 151 13,899 7574 1015 20,000 1112 1,63,137 1877-78 81-0 114,743 1,30,757 13,899 7574 409 21,112 4014 1,67,354 1875-70 33 33 114,070 1,30,973 13,734 7312 034 34,015 885 1,70,737 8refunn	1872 73	:0.10	113,165	1,83,831	••	12 840			20,781		1,72,696	43
1875 70 20-01 113,140 11,34,033 12,010 0000 4768 20,000 1112 1,63,077 1876-77 22-0 112,214 1,33,410 151 13,899 7574 1015 20,000 1112 1,63,137 1877-78 81-0 114,743 1,30,757 13,899 7574 409 21,112 4014 1,67,354 1875-70 33 33 114,070 1,30,973 13,734 7312 034 34,015 885 1,70,737 8refunn		24-29	113,275	1,31,011	••	12.754	7055		20 761		1,79,115	44
1875 70 20-01 113,140 11,34,033 12,010 0000 4768 20,000 1112 1,63,077 1876-77 22-0 112,214 1,33,410 151 13,899 7574 1015 20,000 1112 1,63,137 1877-78 81-0 114,743 1,30,757 13,899 7574 409 21,112 4014 1,67,354 1875-70 33 33 114,070 1,30,973 13,734 7312 034 34,015 885 1,70,737 8refunn	1571-75	47 793	113,100	[1,84,923]	4]				27,625			50
1677-78 81-70 114,743 1,80,767 13,818 7674 499 81,112 4014 1,67,854 1870 1,80,973 13,734 7312 634 34,015 685 1,70,737 8700 880	1575 70	20-61	113.149	1,31,033		12,619	6707		20,000		1,63,307	47
1677-78 81-70 114,743 1,80,767 13,818 7674 499 81,112 4014 1,67,854 1870 1,80,973 13,734 7312 634 34,015 685 1,70,737 8700 880	1570-77		112,214	1,83,410	151				20,000			14
1875 70 . 30 35 114,070 1,80,073 13,734 7312 634 34,015 885 1,70,737 Rection Survey.			114.743	1,36,767		13 618	7574		31,112			23
Recinon Survey,	1875 70 .	30 35	114,979	1,30,973		13,731	7312	631				
1879 60 157,377 1,97,610 703 5274 4129 875 31,833 224 2,32,311	Survey.											
	1879 80 1	[153.357	1.07.610	703	5274	4122	875	31,833	291	2.32.311	
16-0 61 113.917 1-06.391 43 693 6099 1166 34.854 1035 2.84.833	1650 61	1	113,917	1,10,331	43		6929		31.854	1035	2.3+.333	
1851-62 112,446 1,04,504 20,205 8520 7020 232 86,230 11,008 1 90,022		1	112,446	1.01,501	80,205				36,299	11,008	1 20,022	
			,	,		V						L I

In 1879-80 the revised survey settlement was introduced into the old Mishrikot petty division of Old Hubli.¹ At the 1848-49 settlement this group contained 100 villages. At the revision survey it included 106 villages of which 104 were in Kalghatgi and two in Dhárwár. The area was 148,720 acres. The country was generally waving, and in the west exceedingly woody, the horizon being bounded by a succession of hills two to three hundred feet high, more or less wooded to the top. The extreme west and south-west border was a continuation of the Kánara forest country. In 1870 little timber remained. All had been cleared many years before the days of forest conservancy. Much young wood clothed the surface, and promised to become timber. Two streams which contained water more or less throughout the year, crossed the tract, joining and passing into Kánara under the name of the Bedtinála, and flowing into the sea under the name of the Gangávali river. In Mishrikot the rainfall varied from 42.95 inches in 1874 to

Chapter VIII.

Land.

Revision Survey.

Dharwar.

1879-80.

Mishrikot, 1879-80.

¹ Colonel Anderson, Survey Commissioner, 233 of 13th March 1880, Gov. Res. 1969 of 15th April 1880, Bom. Gov. Sel. CLXII.

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18 22 in 1871.1 At the time of the original settlement, except along one or two main tracks like those from Kalghatgi to Dharwar and Hubli, it was next to impossible to take a cart anywhere but by most circuitous routes through the fields. Even these roundabout routes were possible only when the ground was free from crop. Cart traffic there was little or none, most of the produce was carried on pack bullocks. Almost the only carts then in use were the Vadars' carts about eighteen inches high with solid wooden wheels often not more than two feet in diameter, as a rule without any metal tyre. A large number of Vadars carried wood to the plains from the villages on the edge of the forest which they were allowed to cut with little or no restriction. Of traffic with Kánan and the coast there was almost none. In 1880 the villages were rich in roads. The great road from Hubli to the coast at Kumta which was opened about 1848, passed close by the eastern edge of this tract. An equally great road, from Hubli to Kumta and Kárwár by the Árbail pass, ran diagonally through the centre of these villages, which again had communication with Dhárwár by a good road. There were also several country roads in connection with the main lines. The average produce prices showed a rise in unbusked rice from 294 pounds in 1820-29 to 50 pounds the rupes in 1870-79 ; jvári from 138 pounds to 42 pounds ; rági from 270 pounds to 52 pounds; gul or coarse sugar from 24 pounds to 16 pounds. The average tillage area had risen from 20,638 acres in 1838-47 to 62,469 in 1878-79 and collections from £2953 to £6151 (Rs. 29,530 - Rs. 61,510). The following is a summary of the details :

Michrikot Land Revenue, 1838-1879.

YEAR.	Occu- pled Land.	Arable Waste.	Collec- tions.	Remis- elons,	Ont- stand- ings.
1838 - 1847 1848 - 1857 1858 - 1867 1863 - 1877 1878 - 79	Acres. 20,638 41,236 56,207 60,090 62,480	Acres, 75,206 81,370 10,507 12,498 6151	Rs. 20,580 40,415 52,586 58,604 61,510	Rs. 8319 181 ::11	Re. 239 3074 0 117

Between 1875-76 and 1877-78 the notices to pay revenue averaged 183 and the sales of land averaged two. In 1880, 646 per cent of Government land were tilled by the men whose names were entered as holders in the Government books; and 35.4 by their tenants. The proportion of tenant tilled land was larger than usual. A good deal of land had been taken by Brahmans and others as an investment who tilled it by tenants. The common terms on which rice land was let were at least half the produce, the holder paying the

¹ The details are: 1869, 30·64 inches; 1870, 40·86; 1871, 18·22; 1872, 31·70; 1873-23 60; 1874, 42·95; 1875, 30·72; 1876, 20·43; 1877, 20·69; 1878, 34·05, Bom-Gov, Sel. CLXII. 49.

² In 99 villages the holder tilled 40 50 per cent of Government land by himself and 1-46 per cent in partnership with others. He let to tonants 8.96 on money ront and 7.25 on produce or grain rent, 703 per cent was yeare, and 7.25 was parampek or unarable. In five villages, 50.14 per cent of Government land was tilled by the holder himself and 0.10 was tilled by him in partnership with others, 9.40 per cent was let to trenants on money rents, 3.50 was sublet on produce or grain rents, 13.18 was waste, and 7.98 was parampok or unarable. In two villages 57.45 per cent of Government land was tilled by the holder himself, 0.36 per cent was tilled by him in partnership with others, 7.00 per cent was let to trenants on money rent, 2.40 per cent on produce or grain rent, 6.35 was waste, and 4.25 parampok or unarable. Bom, Gov, Sel, CLXII, 61,

assessment. More than half the produce was paid when the holder provided seed and bore a share in the other expenses.

During the thirty years of the survey settlement, flat roofed and tiled houses increased from 1695 in 1848 to 4999 in 1878 or 19492 per cent; carts from 926 to 1678 or 81.20 per cent; wells and waterlifts from 258 to 622 or 14180 per cent; and watering ponds from 423 to 460 or 8.74 per cent; population showed a slight fall from 31,974 to 31,817 or 0.49 per cent; thatched houses decreased from 4273 to 2529 or 40.83 per cent; farm cattle from 13,476 to 12,909 or 4.20 per cent; cows and buffaloes from 25,830 to 17,920 or 30 62 per cent; sheep and goats from 1669 to 1102 or 33 97 per cent; and horses from 334 to 215 or 35.62 per cent. Mr. Fletcher the deputy superintendent of survey attributed the decrease or rather the absence of increase in population to the 1876-77 famine. Colonel Anderson, the Survey Commissioner, admitted that the very high famine prices must have forced some of the labouring and non-agricultural population to leave their homes in search of work. At the same time he thought that the loss of population was chiefly due to the fever which had wasted the villages for several years, and to a less extent to settlers moving to Kanara and to other districts. Except on the banks of the Bedtinala where was some superior black and brown soil, excellent for every kind of tillage, the soil was generally a stiff red well suited for rice and sugarcane, but less suited for dry crops. In the extreme eastern villages the rainfall was not too heavy for excellent dry-crop tillage, jvári, bájri, cotton, and oilseeds. Further west the country gradually changed into a purely rice-growing tract, the dry crop cultivation being for the most part confined to ragi or nachni. Rico dependent on rainfall alone was everywhere an uncertain crop. But most of the rice lands had the benefit of water storage which could at the worst give them one watering and in many cases furnished them with a constant supply. Much rice was also watered by drainage from neighbouring high grounds guided by kálvás or water-courses. As regards dry crops each division from east to west had its own staple, jvari in the east, ragi in the west, and a mixture of both between the two extremes. For these dry crops the rainfall was always sufficient. Even in 1876 the worst year on record the dry crops were generally good and in some villages excellent. main crop of rice was often followed by pulse; and in the better rice lands sugarcane was grown once in three years. The dry crops were jvári, hájri, a little cotton, and some oil-seeds in the eastern villages where the rainfall was moderate, and ragi in the western villages. The rico lands were usually well tilled and all available manure was used. In the east where the chief tillage was dry crop, the cultivation was also good. In the western villages ragi which was chiefly grown as a dry crop was secondary to rice which claimed the first care and attention; still what manure could be spared from the rice was applied to the ragi. The whole garden area was only fifteen acres. This tract was just north of the line below which both in Dharwar

Revision Survey.

Mishrikot,
1879-80.

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¹ The cultivation details are: Lharif 70 09 per cent, rabi 1.92, and wasto and fallow 27-99. Of the 70-09 per cent of Lharif the details are: cereals 63 11, pulse 1 02, eit-reeds 1.61, mircellaneous 13-99; of the 1.92 of rabi the details are: cereals 0.03, pulse 0.27, fibre 0.60, miscellaneous 1.02. Mr. Fletcher, Deputy Superintendent of Survey, Bom, Gov. Sel. CLXII, 39.

DISTRICTS.

Chapter VIII.

Chapter

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Land. REVISION SURVEY. Mishrikot, 1879-80.

and in Kanara betel and cocoa-palm gardens were found. All exportable produce was readily carried to market. The very great cart traffic from the inland parts to the coast created constant demand for fodder. Kalghatgi and Bammigatti were both good market towns and were centres of the rice trade. Dhárwár and Hubli were at no great distance, and, at any time of the year, could be reached by good roads. There were no manufactures excepts few cotton and woollen looms. There was fever owing chiefly to bad water. But the people suffered less than strangers. On the whole the people were well off. The villages were remeasured and reclassed The following is a comparison of the area of the different kinds of lands according to the original and the revision surveys :1

Mishrikot Area, 1849 and 1880.

1 22164, 204	18 ana 18	80.
Land.	First Survey Acres.	Herision Sun ey Acres.
Arable Dry-crop	59,526 32,837 56,851 149,263	80,948 81,091 15 50,076

For revision purposes, the villages were grouped into five classes. The first contained three villages, close to and west of the old Hubli villages. The other classes were formed of twenty-three, thirty-one, thirty-six, and thirteon villages each further west than the class before it. The highest dry crop acre rates adopted in these classes were 4s. (Rs. 2), 3s. 3d. (Rs. 12), 2s. 9d. (Rs. 12), 2s. 3d. (Rs. 11), and 2s. (Re. 1). The highest rice acre rate was 16s. (Rs. 8) in the first three classes, 15z (Rs. 71) in the fourth, and 14s. (Rs. 7) in the fifth class. The garden land was considered little better than rice land and was rated accordingly. The effect of the revision was an increase of 34.3 per cent in assessment. The details are?:

Mishrikot Revision Settlement, 1879 80.

1	1.		er Berve	r.	Revision Survey.								
CLAS	CLASS.	Occur	ied Land,	Occuj	ied Land.	Arab	ie Waste		Total.	Increase	(11.		
_	15	Arca.	Assess- ment.	Area.	Assess- ment.		7.		Assess.	of Assess- ment	Acre	Rate	
II III III IV V .	23 31 35 13	Acres 3224 21,003 20,636 14,422 953	Rs 2519 18,003 27,653 18,337 1704	Acres. 3347 22,237 20,867 14,540 1004	Rs. 8772 26,593 86,268 22,920 2114	Acres, 59 191 1779 3316 602	Rs. 20 73 1485	Acres. 8406 22,478 28,646 17,850 1606	Rs. 3792 26,060 37,753 25,910	47 4 47 2 82 0 25 0	Crop. Rs. 2 14 15	Rice Ra. 8 8	
Potal.	100	67,243	68,216	68,045	91,667	5047	5014		2500 96,031	24·7 84·3	<u>i'</u>	<u>'</u> '	

Four villages showed an increase of more than seventy per cent in assessment, Sangotikop of 200 per cent, Kale Devarkop of 110.4 per cent, Galginkati of 849 per cent, and Sidapur of 71.8 per cent. All of these villages had a large increase in land liable to water-rates. During the ten years before the original survey settlement,

(1838-1848), the tillage area slowly rose from about 19,000 acres in

Bom. Gov. Sel. CLXII. 2-3.

1838-39 to about 22,000 acres in 1847-48 and collections varied from about £4780 (Rs. 47,800) in 1847-48 to about £3100 (Rs. During the first ten years of the survey lease 31,000) in 1838-39. (1848-58), the tillage area rose from about 25,000 acres in 1848-49 to about 51,000 acres in 1857-58 and collections from about £2520 to about £6320 (Rs.25,200-Rs.63,200); during the next ten years (1858-68), the tillage area rose from about 52,000 acres in 1858-59 to about 58,000 acres in 1867-68, and collections from about £6440 to about £7550 (Rs. 64,400-Rs. 75,500); and during the clever years ending 1878-79, the tillage area slowly rose from about 58,000 acres in 1868-69 to about 62,000 acres in 1878-79 and collections varied from about £7950 (Rs. 79,500) in 1872-73 to about £7400 During the three years after the revision (Rs. 74,000) ir. 1869-70. settlement (1879-1882), the tillage area steadily rose from about 62,700 acres in 1879-80 to about 63,000 acres in 1881-82, and collections varied from about £10,100 (Rs. 1,01,000) in 1880-81 to about £8700 (Rs. 87,000) in 1881-82. The details are1:

MishriLot, 99 Villages: Survey Results, 1838-1882.

WASTE. Jedn TILLAGE. Out Quit Rent Collec-Rain Itupee etand YEAR. ريس: nemle. tions. Prices fall. Rental. ings. ing Arcš. Rental. Arca. rions Fees Refore Lbs Ra. Re. Ra. Rs. Inche Acres. Re. Acres Ne. Surrcy 72,735 71,325 71,325 72,095 67,815 73,670 75,323 75,2-3 75,731 75,610 27,633 27,634 25,634 26,634 27,736 23,716 23,716 23,717 23,717 19,163 14,459 10,9-6 21,471 21,240 21,463 10,667 20,554 21,737 22,133 82,515 29,747 31,424 34,749 34,118 35,529 31,676 31,676 31,674 12,653 2161 1763 12,510 1031 31,141 1639.39 41,729 44,000 47,100 49,025 47,155 14,461 14,771 14,181 14,370 201 167 167 167 163 14 22 70 14 14041 . ٠. 450 450 450 821 ••• 1411-12 1291 ••• 2103 2 00 (27) 1542 43 1513-44 *** 14,602 14,625 14,183 15,000 14,111 40,577 47,668 44,265 47,767 •• ٠. •••]#1145 1515-16 ••• 1451 1726 1330 2017 2760 ••• 1616 47 1359 1547-49 23,501 Surery. 13,523 12,640 12,477 14,479 12,425 14,103 15,253 27,210 64,769 43,255 75,607 65,728 61,076 25,240 27,477 24,078 27,766 40,270 41,474 42,678 25,001 50,001 10,723 10,430 10,430 10,430 10,605 11,606 11,606 11,608 11,614 11 29,318 84,503 79,245 89,661 40,025 41,255 42,446 44,315 45,719 45,601 47,125 48,753 51,345 1100 17,773 1919-49 1410 44,172 34,031 34,030 32,775 31,973 1417 50 G 100 164 .. 12,062 1550 51 1851-52 1572 53 1457 54 4513 48 --ŏ. 3491 3327 *** 100 49 112 3718 4000 3225 257 70,000 31,025 24,270 21,276 01,076 01,073 02,673 03,617 13,180 61,363 05,614 70,616 . . 26 77 48 1851-55 ... 45,678 45,678 45,623 46,432 51,851 15,170 1-55 (4) 123 15,070 14,751 14,640 14,616 1450 57 23,629 23,002 20,070 10,570 2518 2618 2145 2149 1617 69 .. 111 51,073 55,650 is no ٠ ... 17,052 17,318 70,816 71,058 70,234 73,031 74,055 74,055 74,057 75,512 76,613 74,702 75,731 1800 01 65,099 67,094 67,004 67,004 67,009 67,001 67,001 67,001 67,013 67,414 67,021 61,510 61,515 81,630 63,822 63,724 63,678 10,379 2110 1461 62 30 20 30 17,102 17,176 17,512 17,619 16,070 *** 2120 2120 2120 2120 2130 14,230 14,415 18,741 10,015 1962 63 ••• •• 18,143 ٠. 11-5-M 11-8-67 1.01 .. 147770 19,015 18,+61 BOOL 65,003 (5,351 65,401 66,059 ٠. 1607 64 1464 67 1477 70 1670 71 3191 17,120 17,012 16,917 14,023 10,283 10,284 8201 .. 170 61 ••• 70 64 40 M 18-22 31 70 27 60 42 05 10-72 20 47 ... 3003 3770 4103 ĬĞ 61,812 61,640 ٠ Ŀ 1870 71 ... 1871-72 . 1872 73 . 1873 74 . 1874 75 ... 1870 77 ... 1877-74 19,6.75 20,145 6140 5611 63-6 16,761 14,612 14,612 75,231 70,522 76,676 00 48 45 60 10,115 4111 1000 ..., 10' 14,512 77,4°0 77,514 61,813 CO,0 :1 14,497 14,54.1 14,575 62,645 62,64 62,532 61,172 61,425 61,730 32 4169 18 77,414 77,002 77,570 10'3 Īmi 74 6146 770 1421 1477-74 26 6.1 62,169 01,610 117 6161 4014 1378 11,605 31 05 11-75 70 Perision barrey 02,456 1,01,208 67,111 76,620 64,837 64,630 1310 4921 5763 1251 18,633 16 62,775 62,795 63,953 157940 . : 18,632 18,905 1850 hl ... 1841-52 1991 1377 ••• 18 13,695 2611 280

1 Bom. Gov. Sel. CLXII. 26, 49, 71.

Chapter VIII.

Revision Survey.

Michridot,
1879-80.

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Land.
Revision Survey.

Nulgend,
1880-81.

In 1880-81 the survey settlement was revised in a group of twenty-nine villages which had formed the old Mulgand petty division of the old Dambal sab-division and had been settled by Captain Wingate in 1850-51.1. Since the original settlement the group had been broken up. At the time of revision eleven of the villages were in Hubli, sixteen in Gadag, and two in Navalgund. These villages were widely scattered. One group or strip came to within six miles east of Hubli; a second group was about eighteen miles further cast and to the south of Gadag, and a third small group lay on the Tungbhadra, eighteen miles south-east of the nearest point of the second group. One village Niralgi was detached from the rest about ten miles north-east of Gadag. The three main groups of villages which this survey block included differed greatly from each other. The western group was one of the very best parts of the Dharwar district consisting entirely of deep black soil and all within the line of good rainfall.2 The central group round Mulgund also consisted chiefly of black soil, through which masses of granite or rather gneiss sometimes large enough to form small hills protruded. The extreme eastern villages of this group as well as the villages on the Tungbhadra in the east touched the Kapat range, which strotched from the river close to Gadag. The rainfall of the three groups differed greatly. The western villages had a good fall, the central a fair fall, and the south-eastern a poor The products of these villages were the common products of the Dharwar cotton plain. Cotton the staple was grown once in three years in turn with wheat and juin with which safflower and linseed were mixed in occasional rows. They chiefly trusted to the late or rabi crops.3 In all ordinary times tillage was good and especially in the western and central groups the people were very well-to-do. The 1876-77 famine had pressed heavily on the villages in the east of the central group and on the south-eastern group near the Tungbhadra. By 1880 they had considerably improved, and it was thought that with oxisting high prices and a year or two of good crops the effects of the famine would pass away. The villages of the south-east group were worst off and were far removed from the main lines of traffic. Communication was opened westward by country tracks which were available for traffic during the whole fair season. The western group was crossed by two main made roads from Gadag to Dharwar and from Annigeri to Hubli. The Annigeri-Hubli road was a main line of communication from all the country inland to Hubli and the coast. Another road ran from Hubli by Hebsur to Navalgund. It had been begun during the 1876-77 famine, and without a very heavy outlay on bridges could not be of

2 Ingalhali one of the western villages was for fifty miles round considered a model village. Others near it were nearly, if not quite, as good. Colonel Anderson, Survey

¹ Colonel Anderson, Survey Commissioner, 311 of 8th April 1880 and Gov. Res. 2601 of 18th May 1880, Bom. Gov. Sel. CLIV.

^{**}Commissioner, 311 of 8th April 1880, Bom. Gov. Sel. CLIV. 180.

**Between 1874 and 1879 the yearly averages were lharif or early 29,500 acres or 35-75 per cent, and rabi or late 46,623 acres or 61-25. The details are: **Lharif, real jrári 19,640 or 25-80, bájri 142 or 0-19, rice 116 or 0-15, tur 2207 or 2-90, may 1926 or 2-53, miscellaneous 5469 or 7-18; **Rabi, white jrári 4873 or 6-40, wheat 9340 or 192-27, American cotton 17,839 or 23-51, country cotton 5557 or 7-33, gram 1324 or 174, linseed 550 or 0-74, **Lardai or safilower 1026 or 2-13, miscellaneous 89 or 0-12, garder cultivation 117 or 0-16, waste and fallow 4844 or 6-36. Bom. Gov. Sel. CLIV. 166.

much use. The central group of villages had free communication with Hubli, the main local trade centre, by country tracks across the black plain during all the fair season. Except during or for a few days after rain, these tracks were for all practical purposes as good as the best made roads. A main line also rau from Gadag to Kumta through Mulgund by Savanur and Bankápur. It was a useful line but the road had not been brought into good order.

The mass of these villages, including all the western and nearly all the central group, had formed part of the estate of the Tasgaon branch of the Patvardhans. It lapsed to Government on the chief's death without heirs in 1848. The revenue management of the Tasgnon chief according to native ideas had been fairly good. There was a high nominal domand and as much as possible was collected, and cultivation to the full extent of a landholder's power was to a certain extent compulsory. The chief objects of the management were to provent any diminution of cultivation and to extend it by all available means so as to exact for the landlord the whole surplus produce beyond what was necessary for the support of the landholder, but yet so cautiously and carefully as not to disable him from continuing his cultivation. Shortly after the chief's death, in anticipation of the lapse of the estate to the British Government, severe pressure was put on the landholders, and after the lapse, from the absence of any trustworthy data on which to base the collections, the pressure on individuals was very heavy and yet much less revenue was realized than under the chief. 1850 when the first survey of these villages was introduced the people showed a keen anxiety for the introduction of the settlement. From the two years of British management before the settlement, 1848-50, no conclusions can be drawn, except that it was fortunate that the state of things then existing did not last long. There was no certainty about any of the figures except those of collections. The areas of occupation were obtained by a conversion of the old bijvari or seed area recorded as cultivated, on the proportion obtaining between the bijvari or seed area and that ascertained by the survey to be occupied in the year of settlement. It appeared, however, to the Survey Commissioner that about one-fifth of the area occupied in 1848-49 was thrown up in the following year. In 1850-51 when the survey settlement was introduced, 49,508 acres were occupied, with a full survey rental of £4127 (Rs. 41,270) of which £3762 (Rs. 37,620) only were collected. The difference between the new and old rates was as usual remitted in the year of the introduction of the settlement. From that year progress was rapid. In the next year, 1851-52, the occupied area rose to 60,475 neres and the collections to £5057 (Rs. 50,570). In 1860-61 the occupied area had risen to 74,255 acres and the collections to £5922 (Rs. 59,220). Then progress went on without check and in 1878-79, 77,466 acres were occupied and £6189 (Rs. 61,890) From 1855 till the 1876 famine there were were collected. neither remissions nor outstandings. After the famine there were small remissions and outstandings. In 1877-78 and 1878-79 there were no remissions and at the end of 1878-79, only £18 (Rs. 180) were outstanding. In 1878-79 the unoccupied arable waste

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Revision Survey, Mulgund, 1880-81,

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Revision Survey.

Mulgund,
1880-81.

amounted to acres 2351 bearing an assessment of £45 (Rs. 450) and most of this was in the south-eastern group where there was much poor land. The western villages had only ten acres of arable waste. During the original settlement, as in the rest of Dharway produce prices rose more than 100 per cent; flat roofed and tiled houses rose from 5180 to 6290 or 21.4 per cent; carts from 300 to 1142 or 269 5 per cent; and watering wells from 50 to 95 or 90 per cent. The survey census was taken in the monsoon of 1879, after the close of the famine. The return showed a decrease under population from 25,761 to 22,794 or 11.1 per cent; under thatched houses from 67 to 34 or 38.8 per cent; under farm cattle from 6539 to 5265 or 19.5 per cent; under cows and buffaloes from 11,262 to 4619 or 59 per cent; under sheep and goats from 6753 to 8620 or 47 per cent; and under horses from 241 to 147 or 39 per cent. In 1879 there were 1614 ploughs and eighty-three drinking wells These figures show a large increase in the better class of houses and in carts. The reduction of population and cattle appears to have taken place in the years of famine. In the western villages the pressure of the famine was not great, the people had some crops, and there were large accumulations of fodder from back years. In the central group the distress was more severe, and in the south-eastern group it was extremely severe.

About half of these twenty-nine villages were entirely remeasured. In the rest the system of partial remeasurement was adopted. The total area of the old and new surveys differed only by 577 acres cr 0.5 per cent. In individual fields a considerable number of large differences were found. On a total of 5678 survey fields, differences between five and ten per cent were found in 297 fields, and differences above ten per cent in 200 fields. A large proportion of these differences were caused by gains or losses near rivers in black soil. The reclassing was only partial and on the plan hitherto adopted in Dharwar, enough being reclassed to show the general standard of the former work. As in other cases the old classification was lower than the 1879 standard in the better soils and higher in the poorer soils. Of 6999 survey numbers in twenty-eight villages in 1879, 5768 or 8241 per cent were Government and 1231 or 17.59 per cent were alienated. Of the Government numbers 3751 or 58:59 per cent were cultivated by the occupant, 123 or 176 per cent by the occupant in partnership with others, 1146 or 1638 per cent by tenants on a money rent, 499 or 6.27 per cent by tenants on a grain rent, 192 or 2.74 per cent were waste, and 117 or 1 67 per cent were unarable or parampok numbers. Of the alienated numbers 506 or 7.23 per cent were tilled by proprietors or inamdars, 65 or 0.93 per cent by the proprietor in partnership with others, 553 or 7.90 by tenants on money rents, and 107 or 1.53 by tenants on produce or grain rents.

The western group of thirteen villages for which, under Captain Wingste's settlement in 1850-51, a highest dry crop acre rate of 2s. 71d: (Rs. 150) was adopted, were now (1880) divided into two classes: For three villages near the great road and nearest to the town of Hubli a highest dry crop acre rate of 4s. (Rs. 2) was proposed to assimilate it to the rate sanctioned in 1874 for the

neighbouring villages of Hubli; for the remaining tenvillages a highest dry crop acre rate of 3s. 6d. (Rs. 13) was proposed to assimilate it to the rate sanctioned in 1874 and 1875 for the neighbouring villages of Hubli and Navalgund. The central group of eleven villages for which a highest dry crop acre rate of 2s. 3d. (Rs. 11) had been adopted in 1850, was divided into two classes; for the eight western villages a highest dry crop acre rate of 3s. (Rs. 11) was proposed, and for the three eastern villages in and close to the hills a highest dry crop acre rate of 2s. 9d. (Rs. 13) was proposed. These rates were the same as those sanctioned for the neighbouring villages of the Gadag subdivision in which the revised settlement had been introduced in 1875. For the four detached villages in the south-east near the Tungbhadra, which under the 1850 settlement had been put in the same class as the preceding eleven villages of the central group, a highest dry crop acre rate of 2s. 6d. (Rs. 11) was proposed. For the detached village of Niralgi the highest dry crop acre rate was raised from 2s. to 2s. 9d. (Rs. 1-13). area of rice land had risen from ninety-four acres in 1850 to 220 acres in 1880 of which 212 were Government land. For this land a highest acre rate of 12s. (Rs. 6) similar to the rate sanctioned for the Gadag sub-division was proposed. There was no stream watered garden land. The area of well watered garden land had risen from 135 acres in 1850 to 275 in 1880. As was usual in revision settlements, well watered land was charged no extra rate for water. The well garden land was almost entirely confined to the eastern villages, the deep black soil in the west being unfavourable for well sinking. The effect of the revision was a rise of 55.4 per cent The details are: in the assessment.

Mulaund Revision Settlement, 1880-81.

		Former	SURVEY.				Revisio	n Borve	t.		
~	vn.	Occu	pled.	Occu	pied,	177	ıste.	To	taL	In	Highest Dry crop
CLASS.	lages.	Area.	Rental	Area.	Rental.	Area	Rental.	Area.	Rental	Per Cent.	Acre Rate,
I III IV V	3 10 8 4 4	Acres. 6044 36,338 25,073 4015 5171 77,466	Rs. 6391 32,003 16,094 3013 2582 61,889	Acres. 6768 35,813 21,815 4733 5326 77,945	Rs. 10,706 52,951 25,046 4249 3151 90,102	10 300 140 2524 2080	Rs 71 55 525 665	Acres. 6758 35,823 26,115 4879 7850	Rs. 10,796 52,062 25,120 4203 3676 00,857	58°0 60°0 47°3 41°0 22°0 55°4	Rs. a 2 0 1 12 1 8 1 6 1 4

The effect of the settlement on Government occupied land was an increase of 55.4 per cent in the rental. This average rate of increase was not equally distributed; in the three villages of the first class it amounted to 68.9 per cent, which was about the same or perhaps a little less than the increase in the neighbouring villages settled in 1874. In the lower classes the percentage of increase was still less, and in the lowest class, which was in all respects the most inferior, it was least of all. This fifth class had one village Chaginkeri which showed an increase of 52.6 per cent. This increase was due to the making of a reservoir by Government under which ninety-two acres were watered. Except in Chaginkeri the average percentage increase in the villages of the fifth class

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Chapter VIII. Land. REVISION SURVEY. Mulgund, 1880-81.

The new survey showed an extra area of 2980 was only 10.2.1 acres of Government unoccupied arable assessed waste bearing a survey assessment of £66 (Rs. 660). This was almost without exception, poor land in the eastern villages near the hills. The following statement shows the total area and the assessment under every head:

Mulgund Revision Settlement, 1880-81.

		FORMET	SURVEY.	Revision Survey,			
Land.		Area	Rental.	Area.	Rental.	Quit Bent.	
Govern- { Gecu ment { Unoc Allenated Unarable	copled	2351 16,088	Rs. 61,888 454 13,401	Acres. 77,945 2990 15,702 9500	Rs. 96,192 065 20,576	Rs 6071	

According to the old rates the average acre rate in all kinds of land was 1s. 7d. (121 as.); under the proposed rates it amounted to 2s.55d. (Re. 1 as. $3\frac{3}{4}$) or an increase of 104d. ($7\frac{1}{12}$ as.). The proposed rates were sanctioned by Government in May 1880.

During the two years before the survey settlement (1848-1850), the tillage area fell from about 54,000 acres in 1848-40 to about 43,000 acres in 1849-50 and collections from about £5800 to about £5000 (Rs. 58,000 - Rs. 50,000). During the first ten years of the survey lease (1850 - 1860), the tillage area rose from about 49,500 acres in 1850-51 to about 73,000 acres in 1859-60, and collections from about £3760 to about £6560 (Rs. 37,600-Rs. 65,600); during the next ten years (1860-1870) the tillage area varied from about 75,700 acres in 1864-65 to about 74,300 in 1860-61 and collections from about £6800 (Rs. 68,000) in 1863-64 to about £6600 (Rs. 66,000) in 1860-61; and during the last ten years (1870-1880), the tillage area varied from about 77,500 acres in 1878-79 to about 75,200 in 1870-71 and collections from about £6990 (Rs. 69,900) in 1878-79 to about £6760 (Rs. 67,600) in 1871-72. The details are:3

. ² Colonel Andersovi, Survey Commissioner, 311 of 8th April 1880 and Gov. Res. 2601 of 18th May 1850. Bom. Gov. Sel. CLIV, 149-160, 202-207. ⁸ Bom. Gov. Sel. CLIV, 162-163.

¹ The increase of assessment in these twenty-nine villages was higher than that which had occurred in the more recent revision settlements in Dharwar and more on a par with that of the earlier revisions, for the reason that the later revised subdivisions were originally settled on a slightly higher standard than the sub-divisions first settled and first revised. These Mulgund villages, in consequence of their very depressed condition, were originally assessed on the low standard adopted by Captain Wingate in the sub-divisions first settled by him, such as Hubli and Navalgund. The increase of assessment in Mulgund therefore was more on a par with that in Hubli and Navalgund which was 61-15 per cent than with that of Dharwar where it was only 39-8 per cent. Bom. Gov. Sel. CLIV. 156.

Mulgund, 29 Villages : Survey Results, 1848-1880.

		TILLAOF.			WASTI	<u>.</u>	T.	Out	1
Yran.	Area,	Rental	Remis- sions,	Area	Rental	Graz- Ing Feet	Rent.	stand- inge.	Collec- tions.
Before Surery	Acres	Re.	Re.	Acres.	Rs.	Re	Tte	Rs	Rs
1819-49	[4,1°0 43,252	60,774 46,245	13,3°5	1937. 28,220		410	10,404	02GT	E7,985 4P,616
Survey.									
1806 51 1871 52 1852 23 1852 23 1853 54 1854 55 1856 75 1856 60 1856 6	CO.475 GI.100 GI.400 GI.400 FO.557 FO.400 FO.500 FO	41,000 10,001 11	2419	20,800 12,000 12,617 13,471 10,000 4717 2017 2017 2017 2017 2018 2018 2018 2018 2018 2018 2018 2018	12,509 C 200 6191 6771 4074 2634 2634 1145 607 678 200 461 411 748 745 745 745 741 492	1002 614 614 1251 1078 609 424 603 214 214 217 210 212 212 212 212 213 214 214 214 214 214 214 214 214 214 214	5000 6765 6765 6316 6305 6542 6505 6514 7416 7416 7416 7416 7417 7417 7417 74	21,537	87,622 67,176 68,713 61,123 61,213 61,213 61,000 61,000 61,000 61,000 61,000 61,700
1470 71 1571-72 1472 73 .	75,169 75,215 75,154	60,000 60,019 60,023	:	57.10 57.10	611 625	110 110	74C3 7401 7893		67,673 67,659 67,600
1473 74 . 1474-75 . 1875-76 . 1476 77 . 1577-73 .	75,291 75,718 75,767 75,763 77,355	60,074 60,075 60,071 60,071 61,426 61,449	:: ::34	211 2111 2111	463 410 431 443	100 100 100 100 100 100 100 100 100 100	7297 7273 7429 7503 8113 6071	1073 208 176	67,762 67,762 67,501 60,600 69,736
1470 40	77,000	61,710	_:	52.74 52.71	455 (33	110 104	F010	202	67,632 67,632

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Mulgund,
1880-81.

In 1881 in consequence of the effects of the 1876-77 famine and the existing low prices of field produce Government decided to give the holders of land temporary relief from a portion of the revision settlement enhancements. With this object Government ordered that in all village groups in which an enhanced revision settlement had been introduced, during the three years ending 1882-83 such temporary remission should be granted on each kháta or holding as would bring the revision enhancement down to about twenty per cent advance on the former assessment. After 1882-83 the full revision rates were again to be realised.

The following statement² shows for the whole district the chief changes in tillage, remissions, collections, and outstandings, since the introduction of the revenue survey. It appears from these details that the tillage area has risen from 568,328 acres in 1843-41 to 1,273,432 acres in 1881-82, the Government demand from £82,456 (Rs. 8,24,560) to £159,661 (Rs. 15,96,610), and collections from £96,750 (Rs. 9,67,500) to £157,976 (Rs. 15,79,760). During the same period remissions have fallen from £7546 (Rs. 75,460) to £27 (Rs. 270) in 1880-81 and outstandings from £8236 (Rs. 82,360) to £256 (Rs. 2560) in 1880-81.

SURVEY RESULTS, 1843-1882.

Gov. Letter 2469 of 3rd May 1681.

² Supplied by the Survey Commissioner.

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Dhdrwdr, 1173 Villages : Surrey Results, 1843-1882.

]		Tillage.			Waste.		1_ /	LIENATI	D.	Out	<u> </u>	-1
YPAR.	Arca.	Rental	Remis-	Ares.	Rental.	ing Fees	Area.	Rental	Quit Jient.	rand. ingr.	Collec- tices,	111111
Before Survey.	Acres.	Rs.	fle,	Acres.	Ra.	Ra	Acres	Rs.	Rs.	Rs.	Ra	
1839 39 1912 43 .		9,53,200 9,02,217					(%),(42 (41,141		2 61,773 2,03,510			
Surrey												
1813-44	(31,0%		20,160	167,516 125,104		41.292	170,634 (63,725	1	2,91,530 2,55,59		8,67,001 10,03,505	5
1819 to 1832 f3 1957-58	9:0,502	1,70,531 8,60,692 10,012-1	570	100 (**)	2,06,034 1,12,722 1,23,13	14.990	12. (2)	6,49,105	2.23,4 4	27 15	10,71,19; 11,*1,14	117
1902-03 1907-03	1,241,379 1,321,737	10,64,727	3. 20	93,533	71,047 50,012	131.741	572.023	71,619 5,41,519	2 91 025		11,12,05 11,12,05 11,16,13	1173
1973-74	1,275,550 1,255,100	10,09,77¢ 11,00,101	14	131,414 116,525	71,04	41,076	501,40	3,67,00A 210,73/	2,03,343	6	14,33,173 14,99,0°	1172
Revision Survey.												
1575-76 .	1,501,011	13,11,517	E1	107,714 107,017	85,093	27,147,	502,031	1,18,54¢ 1,45,271	3,15,4%	16	15,79,538 10,54,628	314
1877 78	1,504,662 1,521,894	11,97,431	.,,	102,633	84,812	20,030	343,217	1,81,709 1,81,709	1,31,012	37,924 34,573	15,65,000 17,02,678	351 351
1979 60	1,312,102 1,257,625 1,278,100	15,99,64	700	122,616 142,721 151,147	10,5	14,027	42,012	1,21,131 2,60,03,7 214,14,7	3, 13, 540	2709	19,41,417 19,63,517 19,60,634	1110
	1 273,633			156,477	1,03,63	10,391	779,121	7,78,023	3,10,720	2,57,640	15,70,78	113

Waste, 1884.

In 1870 the arable lands of Dharwar were fairly tilled though there was still room for improvement. Everywhere except in the black cotton lands a considerable area of land was held and instead of being tilled was kept under grass. No data are available to show what proportion of the whole occupied area is kept under grass; in the western and southern sub-divisions it must be considerable. In the black soil tracts no land is kept under grass. In many villages in the north and centre of the district which have nothing but black soil, there is no grazing and the cattle are all stall fed. The finest cattle are generally found in villages which have no grazing. A considerable amount of the arable waste is at present used for grazing. But as the people prefer to take it at the yearly grazing sale for one year only, it does not come under the head of Some of these unoccupied arable lands are valuable occupied. grazing lands which are not allowed to be occupied, as, for grazingpurposes they fetch a considerably higher yearly nuction rent than the survey assessment. Some also consist of odd fields near village sites much intersected by paths and roads and therefore liable to suffer from the trespass of cattle. In 1878 the area of anoccupied land was extremely small and what there was was of poor quality. Since 1878, partly in consequence of loss of cattle during the famine and the damage caused by rats and locusts in 1879 and 1880, and chiefly, especially in the hilly and sandy soils of some of the eastern sub-divisions, from the low price of field produce in 1881 and 1882, the area of arable waste has steadily spread from 102.438 acres in 1877-78 to 160,654 in 1882-83.2

Colonel Anderson, 6th November 1879.
 Mr. Stewart, C.S. Survey Commissioner, 811 of 15th April 1884. The details are: Arable waste 102,433 acres in 1877-78, 122,648 acres in 1878-79, 142,724 in 1879-80, 154,147 in 1880-81, 156,477 in 1881-82, and 160,654 in 1882-83.

The area of alienated or inam land fell from 680,964 acres in 1843-44 to 513,297 acres in 1877-78. This reduction is due to the resumption of encroachments during the first settlement, and since then to the gradual falling in of the inams which the Inam Commission confirmed as life grants. The decrease in alienated land has also been largely caused by the resignation of parts of quit-rent or judi inams at the first settlement. When the survey rates were introduced, it often happened that they were lower than the former judi or quit-rent rates. The quit-rent was reduced to the survey assessment. But as much of these lands were waste and vielded the owner no return, a considerable share of them was resigned in the early years of the settlement before land had begun to be valuable.¹

Chapter VIII. Land.

ALIENATED LANDS, 1884.

SECTION IV.—SEASON REPORTS.

In 1861-62 thirty-two inches of rain fell at Dhárwár. Over most of the district the fall was favourable and the harvest large. Except for slight cholera public health was good.2 The collections rose from £166,581 (Rs. 16,65,810) to £169,323 (Rs. 16,98,230); £9 (Rs. 90) were remitted and there were no outstandings. The price of Indian millet rose from seventy-nine pounds the rupce in 1860-61 to fifty-six pounds.

SEASON REPORTS. 1861-62.

In 1862-63 twenty-four inches of rain fell at Dharwar. Throughout the district the early rains were scanty and the early or kharif crops poor. Heavy showers in September and October enabled the people to sow so large an area of late crops that the fullness of the late harvest made up for the failure of the early harvest. Public health was good; though some parts especially in the west suffered from cholera fever and ague.3 The collections rose from £169,323 to £177,741 (Rs. 16,93,230 - Rs. 17,77,410), £14 (Rs. 140) were remitted, and there were no outstandings. The price of Indian millet rose from fifty-six pounds the rupee to forty-one pounds.

1862-65.

In 1863-64 twenty inches of rain fell at Dharwar. Scanty early rains were again followed by an abundant late supply and the harvest did not fall below the average. Cholera was prevalent over the whole district and bad fever and ague prevailed in the west. There was slight loss from cattle disease. The collections rose from £177,741 to £181,745 (Rs. 17,77,410 - Rs. 18,47,450), £17 (Rs. 170) were remitted, and £247 (Rs. 2470) left outstanding. The price of Indian millet rose from forty-one pounds the rupee to nineteen nounds.

In 1864-65 twenty-nine inches of rain fell at Dharwar. The early rain though abundant was unseasonable and damaged some of the early crops; the late harvest especially the cotton was good. Except in Ranchennur, Kod, and Karajgi, where the public health was good, cholera fever and ague prevailed. The collections rose from 1863-64.

1864-65. .

² Bom, Gov. Rev. Rec. 235 of 1862-64, 199,

Col. Anderson, 6th Nov. 1879.
 Bom. Gov. Rev. Rec. 235 of 1862-64, 223.
 Bom. Gov. Rev. Rec. 235 of 1862-64, 247. The Collector, 21st December 1864.

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SEASON REPORTS.

£184,745 to £188,134 (Rs. 18,47,450-Rs. 18,81,340), £14 (Rs. 140) were remitted, and nothing was left outstanding. The price of Indian millet fell from nineteen pounds the rupes to twenty-six pounds.

1865-66.

In 1865-66 eighteen inches of rain fell at Dhárwár. A large proportion of the grain crops failed. In Navelgund Dambal and Ron about five-eighths (10as.) of the early crops were lost from grabs and want of rain; in Dhárwár Hubli and Karajgi about half (8as.) were lost; and in Bankápur, Ránchennur, Hárgal, Kalghatgi, and Kod about a quarter (4 as.). Of the late harvest in Navalgand, Dambal, and Ron about one-half (8 as.) and in the rest of the district about an eighth (2 as.) were lost. Except for a little cholera public health was good. The collections fell from £188,134 to £187,153 (Rs. 18,81,340 - Rs. 18,71,530), £13 (Rs. 130) were remitted, and there were no outstandings. The price of Indian millet rose from twenty-six pounds the rupee to twenty pounds.

1866-67.

In 1866-67 thirty-two inches of rain fell at Dhárwár. The early harvest proved a nearly complete failure, but timely later rains enabled a large area to be sown and the late harvest was excellent. Except in Navalgund and Kalghatgi there was much cholera and Hangal suffered greatly from fever.² The collections rose from £187,153 to £188,991 (Rs. 18,71,530 - Rs. 18,89,910), £13 (Rs. 180) were remitted, and there were no outstandings. The price of Indian millet fell from twenty pounds the rupes to forty-one pounds.

1867-68.

In 1867-68 twenty-nine inches of rain fell at Dhárwár. The June fall was favourable but especially in Dambel the July August and September supply was scanty. Public health was good; fever provailed but there was no cholera or cuttle disease. The collections fell from £188,991 to £186,872 (Rs. 18,89,910 - Rs. 18,68,720), there were no remissions, and 4s. (Rs. 2) were left outstanding. The price of Indian millet fell from forty-one pounds the rugse to seventy-nine pounds.

1868-69.

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In 1868-69 thirty-one inches of rain fell at Dhárwár. The fall was timely and both the early and the late crops yielded a fair return. Except in Hángal and in parts of Dhárwár and Dambal where fever and ague were prevalent, public health was good. Cattle disease prevailed slightly in some of the sub-divisions. The collections fell from £186,872 to £186,163 (Rs. 18,68,720 - Rs. 18,61,630), £5 (Rs. 50) were remitted, and there were no outstandings. The price of Indian millet fell from seventy-nine pounds the rupee to ninety pounds.

1869-70.

In 1869-70 twenty-seven inches of rain fell at Dhárwár. The rains began well but the failure of the September and October supply injured the early crops especially the rice. Timely and abundant rain in November secured good cold weather crops except that jvári was injured by blight. Public health was good. The collections

Bom, Gov. Rav. Rec. 75 of 1866, 60.
 Bom. Gov. Rev. Rec. 67 of 1867, 6,8.
 Bom, Gov. Rev. Rec. 65 of 1868, 318.
 Bom. Gov. Rev. Rec. 65 of 1869, 233.
 Rev. Comr. 74 of 7th Jan. 1870.

rose from £186,163 to £188,547 (Rs. 18,61,630 - Rs. 18,85,470), £5 (Rs. 50) were remitted, and there were no outstandings. The price of Indian millet rose from ninety pounds the rupce to forty-one pounds.

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In 1870-71 thirty-one inches of rain fell at Dharwar. The supply was plentiful and seasonable. The early crops did well and the late harvest did not fall below the average. Except slight fever public health was good. There was a bad outbreak of cattle disease in Kalghatgi. The collections fell from £188,547 to £183,894 (Rs. 18,85,470 - Rs. 18,38,940), £1 (Rs. 10) were remitted, and there were no outstandings. The price of Indian millet fell from forty-

one pounds the rupee to sixty pounds.

1870-71,

In 1871-72 thirty inches of rain fell at Dharwar. In Navalgund, Dambal, Ranebennur, Karajgi, and Ron the early rains either from scantiness or unseasonableness wholly or in great measure destroyed the early crops. Except in Dambal the late harvest was Public health was fair, but cattle disease provailed in most of the sub-divisions.2 Collections fell from £183,891 to £181,817 (Rs. 18,38,940 - Rs. 18,18,170), £2 (Rs. 20) were left outstanding, and there were no remissions. The price of Indian millet rose from sixty pounds the rupee to thirty-nine pounds.

1871-7£.

In 1872-73 twenty-seven inches of rain fell at Dhárwár. Except local failures of rice both the early and the late harvest were good. There was slight cholera, fover, and ague, and a deadly outbreak of cattle disease in Kod. The collections rose from £181,817 to £183,790 (Rs. 18,18,170 - Rs. 18,37,900), £2 (Rs. 20) were remitted, and 12s (Rs. 6) left outstanding. The price of Indian millet fell from thirty-nine pounds the rupee to forty-one pounds.

1872-73.

In 1873-74 twenty-seven inches of rain fell at Dharwar. The early rain was so scanty and untimely that in Navalgand and Ron no crops were sown and the Navalgund cattle had to be sent to the western forest lands. The late harvest was also poor. In Karajgi and Savanur cotton was injured by insects. Fover and ague prevailed in Navalgund, Dambal, Bankapur and Kalghatgi and there was widespread but mild cattle disease,4 The collections fell from £183,790 to £182,051 (Rs. 18,37,900-Rs. 18,20,510), there were no remissions and no outstandings. The price of Indian millet fell from forty-one pounds the rupee to forty-seven pounds.

1878 74.

1874-75.

In 1874-75 forty-eight inches of rain fell at Dharwar. The fall was timely and beneficial to all the early crops. In September October and part of November excessive rain injured some crops and flat roofed houses. On the whole the harvest was good. Ranebennur, fover and ague were widespread, and cattle disease provailed in Kalghatgi and in the west of Dharwar. Collections rose from £182,051 to £196,064 (Rs. 18,20,510 - Rs. 19,60,640), £4 (Rs. 40) were remitted, and there were no outstandings. The price of Indian millet fell from forty-seven pounds the rupee to fifty-two pounds.

Rev. Comr. 38 of 4th Jan. 1871. Rev. Comr. 6369 of 31st Dec. 1872. ² Bom, Gov, Rev. Rec. 81 of 1872, 312, 4 Rev. Comr. 5026 of 29th Dec. 1873. 6 Rev. Comr. 4718 of 29th Dec. 1874.

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In 1875-76 thirty-one inches of rain fell at Dharwar. The early harvest in most of the district was poor and the late harvest fair. In some parts rats caused damage by eating the seed. Navalgund, Dharwar, Hubli, and Kalghatgi suffered rather severely from cholerater and ague prevailed everywhere, and cattle disease caused loss in Kod. The collections rose from £196,064 to £204,997 (Ks. 19,60,640 - Rs. 20,49,370), £13 (Rs. 180) were remitted, and £34 (Rs. 340) left outstanding. The price of Indian millet continued at fifty-two pounds the ruppe.

1876-77.

In 1876-77 sixteen inches of rain fell at Dhárwár. The first fall was good, but rain afterwards held off so completely that the early crops failed in half of the district and in the other half were very poor. As the late harvest failed as well as the early, the scarcity passed to famine, and the labouring classes had to be supported. Water was scarce, and large numbers died of cholera in Dhárwár, Hángal, Karajgi, Gadag, and Bankápur. Collections fell from £204,997 to £201,648 (Rs. 20,49,970 - Rs. 20,16,480), £852 (Rs. 8520) were remitted, and £7242 (Rs. 72,420) left outstanding. The price of Indian millet rose from fifty-two pounds the rupee to nineteen pounds.

1877-78.

In 1877-78 thirty-five inches of rain fell at Dhárwár. The June fall was general and plentiful. But July and August passed with only one fall and the crops in some places perished. Copious rain in September and October saved the harvøst and the outturn of the early crops was abundant. Over large areas early juári yielded a second crop. The late crops were also abundant though damaged by insects. Cholera fever and ague prevailed. Collections rose from £201,648 to £208,252 (Rs. 20,16,480-Rs. 20,35,520), £5 (Rs. 50) were remitted, and £4259 (Rs. 42,690) left outstanding. The price of Indian millet fell from nineteen pounds the rupes to thirty-five pounds.

(878-79,

In 1878-79 forty inches of rain fell at Dharwer. It fell late and was somewhat unfavourable for the early grain sowings, but yielded an abundant supply of fodder. Most of the cold weather harvest especially of the cotton was eaten by rats. Malarious fever prevailed in the east 4 Collections rose from £208,252 to £222,272 (Rs. 20,82,520 - Rs. 22,22,720), £1490 (Rs. 14,900) were left outstanding and there were no remissions. The price of Indian millet fell from thirty-five pounds the rupee to forty-four pounds.

1879-80.

In 1879-80 thirty-eight inches of rain fell at Dhárwár. The season was good. The rats which had done much damage in the year before were destroyed during the monsoon and the crops saved. Public health was good.⁵ Collections rose from £222,272 to £233,049 (Rs. 22,22,720-Rs. 23,30,490), £84 (Rs. 840) were remitted, and £322 (Rs. 3220) left outstanding. The price of Indian millet fell from forty-four pounds the rupee to forty-six pounds.

1880-81.

In 1880-81 thirty-five inches of rain fell at Dharwar. The season

¹ Rev. Comr. 3876 of 31st Dec. 1875. ² Rev. Comr. 380 of 10th Feb. 1877.

Rov. Comr. 138 of 19th Jan. 1878.
 Bom. Pres. Gen. Adm. Rept. 1878-79, 85-86.
 Bom. Pres. Gen. Adm. Rept. 1879-80, 87-88.

was favourable. About August the rains held off, but a supply came in time to save the early harvest. There was a marked fall in produce prices. Fever and ague prevailed, but public health was fair. Collections rose from £233,049 to £239,521 (Rs. 23,30,490-Rs. 23,95,210), £52 (Rs. 520) were remitted, and £292 (Rs. 2920) left outstanding. The price of Indian millet fell from forty-six pounds the rupee to sixty-four pounds.

In 1881-82 thirty-two inches of rain fell at Dharwar. The season was unfavourable. Except in Hangal and Karajgi, the rainfall was considerably below the average and at the same time it was unseasonable. The rice crops failed completely in Kalghatgi and Kod and suffered much in other sub-divisions. The early or kharif crops were generally poor, and, except wheat, the late or rabi crops were also on the whole below the average. Cotton suffered from blight and insects. There was a general rise in the price of all articles except cotton. The public health was good. There were few cases of cholera and malarious fover was less prevalent than usual. The tillage area fell from 1,512,972 to 1,507,941 acres, and collections from £239,521 to £193,418 (Rs. 23,95,210-Rs. 19,34,180), £7800 (Rs. 78,000) were remitted, and £39,008 (Rs. 3,90,080) left outstanding. The price of Indian millet rose from sixty-four pounds the rupce to sixty pounds.

In 1882-83 fifty inches of rain fell at Dhárwár. The rainfall was above the average in all the sub-divisions and in Hángal it was more than double the average. In some places considerable damage was caused by floods and the bursting of pends.³ The heavy rain

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1883-83.

¹ Bom. Pres. Genl. Adm. Rept. for 1880-81, 93-91.

^{*} Gov. Res. 8276 of 27th November 1882.

In July 1852 the rainfall in Dharwar was 5.65 inches during the week ending the Sth, 7.51 inches during the week ending the 15th, and 5.03 mehes during the week ending the 22nd; the corresponding falls in Hubli were 2.91, 4.13, and 2.18 inches; in Kalghatgi 5.99, 6.84, and 4.56 inches; in Brakapur 4.15, 4.82, and 5.15 inches; and in Hangal 5.52, 9.24, and 8.15 inches; in Brakapur 4.15, 4.82, and 5.15 inches; and in Hangal 5.52, 9.24, and 8.15 inches; many houses and five buttersets supporting the main wall of the Jail fell, the Moti Talay which had not filled for several years was filled to overflowing, and the Nigdl pond burst its bank. In Kalghatgi, one of the bastions of the maintaidar's office fell, the provincial road running alongside of the embankment of the pond at Devikop sunk to the level of the rice fields and the rivers Varda and Tungbhadra flooded many of the villages on their banks. In Bankapur, the three villages of Halaur. Manangi, and Koni-Melchalli, were flooded; in Halaur only five houses fell; at Koni-Melchalli the Varda rose almost to the crown of the arches of the bridge on the provincial road from Poona to Harthar, In Hangal, the banks of nine ponds and of the canal which feeds the Tilvalli pend burst; the alienated village of Lakmapur was flooded by the Varda, about fifty head of cattle were drowned, and forty out of forty-four houses fell, the damage was estimated at £200 (18, 2000); nine other villages on the Varda also suffered. Of the twenty-sexen villages flooded by the Varda and the Varda and suffered. Of the Karajgi, the loss being estimated at £3866 (18, 38,660), including £2660 (18, 26,600), the value of the houses destroyed. In Ránebennur, sixteen villages on the funghadra and two on the Kumadvati were flooded; in Hiladhalli only five houses were left standing; in Makmur, Hirebidri, Medleri, and Udgatti, 103 houses foll fifty-five partly fell and more were damaged. Besides the destruction of houses, great loss

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SEASON REPORTS. 1882-83.

at the beginning of the season favoured rice but injured juan. The wheat crop was also inferior and in the south of the district the cotton crop was not good. The prices of wheat and jvári rose, while those of tur and rice fell. Except slight outbreaks of cholera and small-pox and the provalence of malarious fever caused by the heavy rainfall, public health was good. The tillage area id from 1,507,941 to 1,503,011; collections rose from £193,418 to £195,961 (Rs. 19,34,180 - Rs. 19,59,610), £44,419 (Rs. 4,44,190) were remitted, and £120 (Rs. 1200) left outstanding. The price of Indian millet rose from sixty pounds the rupee to fifty-two pounds.

REVENUE 1860-1883

The following statement, shows the chief available yearly statistis of rainfall, prices, tillage, land revenue, collections, remissions, and balances during the twenty-three years ending 1882-83:

Dharwar Tillage and Land Revenue, 1860 . 1884

		hárwár Til	lage and I	Land Rever	ue, 1860 .	⁷²⁻ 83:		
YEAR	Rainfall				REVENUE.			_
		-	Remitted	· Collection	n. Ontstar	nd- Collecte	Irdi Mill M. Roj	et ee
1800 61 1861-63 1862-63 1862-63 1862-63 1863-65 1868-67 1868-67 1868-67 1868-67 1868-67 1869-70 1870-71 1870-71 1872-73 1872-73 1872-75 1872-76 1877-76 1877-77 1877-77 1877-77 1877-78 1877-79 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-70 1878-80 1888-81 1888-82 1888-83	85 40 88 85 35	Acres. 1,622,225 1,621,226 1,623,220 1,630,220 1,630,220 1,630,306	Rs. 91 123 174 185 181 130 130 7 21 21 37 123 8515 54	Bs. 16,65,806 16,03,227 17,77,410 18,61,341 18,71,562 18,68,707 18,01,229 16,65,467 18,58,707 16,18,190 16,27,513 20,63,30 22,37,623 22,37,623 22,38,704 23,98,120 23,98,120 21,60,614	Rs. 2465	Rs. 16,65,80 16,93,69	Poun 7 56 0 41 1 99 1 26 1 29 1 20 1 79 90	25

SECTION V.-STAFF.

STAFF. 1884. District Officers,

The revenue administration of Dharwar is entrusted to an officer styled Collector on a yearly pay of £2160 (Rs. 21,600). This officer who is also Political Agent, Chief Magistrate, District Registrar, and executive head of the district, is helped in his work of general supervision, by a staff of four assistants of whom two are covenanted and two uncovenanted servants of Government. The sanctioned

was caused by the flooding of grain pits, both in the flooded villages and in other was caused by the nooming of grain pits, both in the flooded villages and in other places where the long continued rain scaked the ground to such an extent that the water found its way into the pits. The grain was either damaged or completely of 1889.

1447 of 1889.

Most of these remissions were sums granted to lower revision enhancements "Most or vices remains and same granted to lower revision camanucinents to within twenty per cent of the former assessment. Gov. Res. 7458 of 6th October 1883. See above p. 587. 3 Compiled from yearly Revenue Administration Reports.

yearly salary of each of the covenanted assistants is \$1980 (Rs. 10,800), and that of one of the uncovenanted assistants is \$190 (Rs. 1500) and of the other \$100 (Rs. 6000). For fiscal and other administrative purposes, the lands under the Collector's charge are distributed over eleven sub-divisions, eight of which are entrusted to the covenanted assistant collectors and three to one of the uncovenanted assistants, who is styled the district deputy collector. As a rule no sub-division is kept by the Collector under his personal supervision. The other uncovenanted assistant, who is styled the land-quarter or hour deputy collector, is entrusted with the charge of the treasury. These officers are also magistrates, and the cash have revenue charge of portions of the district, have, under the presidency of the Collector, the chof management of the different administrative bodies, local fund and municipal committees, within the limits of their revenue charges.

Under the supervision of the Collector and his aristant and deputy collectors, the revenue charge of each fiscal sub-division or tilada is placed in the hands of an officer styled mindatdar. These functionaries who are also entrusted with magisterial powers, have yearly relatice varying from £150 to £300 (R- 1500 - 3000). Three of the fiscal sub-divisions contain petty divisions, pethas or stabally, under the charge of officers styled mahillaris, who have no treasuries to superintend, but exercise the revenue and magisterial powers penerally entrusted to a mainlatdar. The mahallari's yearly pay is \$72 (Rs. 720).

In revenue and police matters, the charge of the 1284 Government villages is entracted to 1853 herdmen or patile, of whom 181 are stipendary and 1169 hereditary. Of the stipendary heidmen three perform police duties only, and 181 perform both police and revenue duties. Of the hereditary beadmen 104 perform revenue duties, 109 perform police duties, and thei perform both revenue and police duties The headmen's yearly emoluments, which are in proportion to the revenue of the village, consist partly of call payments and partly of remissions of land assessment. The cash empluments vary from 7c. to £18 6. (R. 31-183) and average about £3 18. 71d. (Re.39 1/2), while the remissions from the land tax range from 1r. to £127-10c. 6d (Re. 1-1275]) and average about £4-13°, 5]d. (Rs. 46 as. 13]) a year. In tome cases in Dharwar and Navalgund the headman's quit-rent is as high as the full curvey as essment. Of $\pm 10,797$ (Re 1,07,970), the total yearly charge on account of village headmen, £5318 (Re. 53,180) are paid in cash, and 45479 (Re. 54,790) of which 4398 (Rs. 3980) are on account of combined headmen and village accountants' grants, are met by grants of land and remessions of w -e-cment.

To keep the village accounts, prepare statistics, and help the village headmen, there is a body of 970 village accountants or LulLarnis. Of the e 171 are stipendiary and 799 hereditary. Each has an average charge of about one village, containing about \$14 inhabitants, and yielding an average yearly revenue of about £237 (R. 2370). Their cash emoluments vary from £1 to £24 6s. (Rs. 10-213) and average about £5 (Rs. 80) a year, and the remissions from the land tax range from 6d. to £47 7s. 6d. (Rs. 1-473)

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and average about £4 4s. (Rs. 42) a year. Some accountants in Dhárwár and Navalgund pay a quit-rent equal to the full survey assessment. Of £11,103 (Rs. 1,11,030) the total charge on account of village accountants, £7745 (Rs. 77,450) are paid in cash and £3358 (Rs. 33,580) are met by grants of land and by remissions of assessment.

Village Scrvants.

Under the headmen and accountants are the village servants with a total strength of 4619. These men are liable both for revenue and police duties. They are generally Hindus of the Bedar and Kurbar or shepherd castes. The total yearly grant for the support of this establishment amounts to £12,969 (Rs. 1,29,690), being £2 16s. 1\frac{3}{4}d. (Rs. 28 as. 1\frac{1}{6}) to each man or a cost to each village of £10 2s. (Rs. 101). Of this charge £6762 (Rs. 67,620) are met by grants of land and £6207 (Rs. 62,070) are paid in cash. In alienated villages the village officers and servants are paid by the aliences, and perform police duties for Government. The average yearly cost of the village establishments may be thus summarised:

Dharwar Village Establishments.

Headmen Accountants Servants		£ 10,797 11,103 12,969	Rs. 1,07,070 1,11,030 1,20,690
Total	-	84,880	3,48,690

This is equal to a charge of £27 3s. 1\frac{1}{2}d. (Rs. 271 as. 9). a village, or fifteen per cent of the district land revenue.

SECTION VI.—ALIENATED VILLAGES.

ALIENATED VILLAGES, 1884,

The holders of alienated villages are mostly Brahmans, and in addition a few Lingáyats and Musalmáns. 1 Of 157 alienated villages eighty-five are held by hereditary district officers under Gordon's settlement, and are continuable only to the descendants of the original grantees, a quit-rent of three-eighths or six annas in the rupee on the profits being levied instead of service. Twentysix villages have been brought under the Summary Settlement Act (II of 1863), and turned into transferable private property. villages have been changed from a grant for a certain number of lives to private transferable property on payment of a yearly quitrent equal to two-thirds of the former rental. The remaining forty villages are held under individual orders passed by the Inam Commissioner and by Government. Of these forty villages ten are held by temples, twenty-one by svámis or high priests, three are jágir or private estates, and six are miscellaneous. With few exceptions the proprietors live in their villages and manage them. The eightyfive villages held by hereditary district officers and the thirty-one held by temples and high priests are not transferable. The families holding the eighty-five hereditary villages are generally subdivided into branches who enjoy separate shares of the land or receive certain

¹Mr. Middleton, Collector, 1789 of 10th May 1884.

shares of the revenue. Other alienated villages are also generally in the hands of the family to which they were originally granted, though much divided among different branches. The alienated villages or village shares which have been made private property, though often mortgaged, are almost never sold except under decrees of the civil The husbandmen in alienated villages are not so well off as in neighbouring Government villages, and tillage is generally more slovenly, as the tenants have no confidence that they will reap the benefit of improvements. Alienees seldom grant tagái or advances to help their tenants, but they show considerable indulgence in recovering their rents. In Begur and Gamangatti the survey settlement has been introduced and the alienees cannot levy more than the settlement rates or oust their tenants so long as they pay these rates. In other villages the rates can be raised at the alience's pleasure and the husbandmen are mere tenants-at-will holding the land from year to year, or in some cases for a term of The tenants generally pay a fixed rent in cash, with in some cases the addition of a certain quantity of grain. Rents are almost never levied entirely in grain. A common arrangement is the kor or share system by which the proprietor and his tenant divide the produce equally, the proprietor supplying the seed and paying the Government demand and the tenant contributing the labour. The rates vary greatly. In good soils they are generally higher than in Government villages, and in poor soils they are the same or lower. Wells and other improvements are seldom made in alienated villages, and never by the tenant except under some special agreement. If there are waste numbers, the tenants are allowed to graze their cattle over them free. Tenants are not allowed to cut timber without the proprietor's leave. In alienated villages into which the survey settlement has been introduced, the Collector aids the alience in recovering his rents up to the survey rates. In other cases if any written or oral agreement is clearly proved, aid is given up to the amount specified. If the agreement is not proved, the rates in force in similar fields are taken as the limit. In intricate and doubtful cases the parties are referred to the civil courts.

Chapter VIII.

ALIENATED VILLAGES, 1884. Chaptes Ls Tre B Ste 18

CHAPTER IX.

JUSTICE.

Chapter IX.
Justice.
Civil Courts.
1818-1846.

AFTER his proclamation of the 11th of February 1818 General Munro introduced civil administration into Dhárwár or as it was then called the Southern Marátha Doáb. Under the title of Principal Collector and Political Agent he exercised the functions of chief judicial, police, and revenue officer over the whole of it. The head-quarters of the district were at Dhárwár. The Southern Marátha Doáb was divided into twenty-one sub-divisors, in each of which a mámlatdár assisted by three or four zilledárs or village group clerks conducted the revenue, magisterial, and police administration.

At the beginning of British rule petty civil claims and disputes were disposed of by the village officers; claims of more importance were entertained by the mamlatdars and referred for final decision to pancháyats or juries; the highest class of claims were filed before the Collector and were referred by him to panchayats for decision subject to final trial on appeal before himself. About the year 1820 or 1821 a separate judicial officer called the adalat peshkar or court's clerk was appointed to each sub-division, but he appears to have been little more than a clerk to the mamlatdar. His office was soon abolished and munsifs were appointed who gradually introduced the judicial system prescribed in the General Regulations of 1827 for the Bombay Presidency. The Principal Collector was aided by a judicial assistant under the title of Registrar. In 1822 some of the sub-divisions of the Southern Maratha Doab were formed into the separate district of Sholapur. By Regulation VII of 1830 the remaining portions of the Southern Marátha Doáb were brought under the General Regulations of 1827 for the Bombay Presidency, and were called the Dhárwár Zilla. As the administration developed the district was found too large for a single charge, and, in 1836, the northern portion was for revenue purposes made into the separate district of Belgaum, the district and sessions court at Dhárwár keeping its jurisdiction over both districts.

In 1846 the district of Dhárwár, excluding the ten sub-divisions of the judicial division of Belgaum, consisted of eight sub-divisions Bankápur, Dambal, Dhárwár, Hángal, Hubli, Kod, Navalgund, and Ránebennur. The court of the District Judge was held at Dhárwár and his jurisdiction extended over the district of Dhárwár and the judicial division of Belgaum. The Assistant Judge also, held his court at Dhárwár and his

jurisdiction extended over the same territory as that of the District Judge. The principal sadar amin held his court at Dharwar and his local jurisdiction extended over the sub-division of Dhárwár and over certain villages in Belgaum. The sadar amin of Hubli held his court at Hubli, and his local jurisdiction extended over the sub-division of Hubli and over certain villages of the Bankápur and Navalgund sub-divisions. The munsif of Háveri held his court at Haveri, a town in the Ranebennur sub-division, and his local jurisdiction extended over the three sub-divisions of Hangal, Kod, and Ranebennur and over certain villages of Bankapur. In 1869 the Belgaum division was made a separate judicial district, and the subordinate courts of the Dharwar district were redistributed. The District Judge of Dhárwar held his court at Dharwar and his local territorial jurisdiction extended over the eleven sub-divisions of the Dharwar District. The first class subjudge of Dhárwár hold his court at Dhárwár, and his local jurisdiction extended over the four sub-divisions of Dharwar, Hubli, The second class sub-judge of Háveri Bankápur, and Kalghatgi. held his court at Haveri, a town in the Karajgi sub-division, and his local jurisdiction extended over the sub-divisions of Karajgi, Hángal, Kod, and Ránchennur. The sub-judge of Gadag held his court at Gadag and his local jurisdiction extended over the three sub-divisions of Gadag, Navalgund, and Ron.

In 1870 the number of courts was four, one district and three subordinate courts, the number of suits disposed of was 2303, and the average duration was 158 days. In 1875 the number of courts was five, one district and four subordinate courts, the sub-judge's court of Hubli being the additional court, the number of suits disposed of was 3760, and the average duration of contested suits was 143 days and of uncontested forty-eight days. In 1880 the number of courts was the same as in 1875, the number of suits disposed of was 3334, and the average duration of a contested suit was 120 days and of an uncontested suit eighty days. At present (1883) the district has a District Judge and four sub-judges. Of the four sub-judges the first class sub-judge of Dharwar besides special jurisdiction above £500 (Rs. 5000) over the whole district has ordinary jurisdiction over the Dharwar and Kalghatgi sub-divisions, the second class sub-judge of Hubli has jurisdiction over the Hubl and Bankápur sub-divisions, the second class sub-judge of Gadag has jurisdiction over the Gadag, Navalgund, and Ron subdivisions, and the sub-judge of Haveri has jurisdiction over the Hangal, Karajgi, Kod, and Ranebennur sub-divisions. The average distance of the Dharwar court from its furthest six villages is eighty-five miles as respects it special jurisdiction and twenty-eight miles as respects its ordinary jurisdiction, of the Hubli court thirty-two miles, of the Gadag court thirty miles, and of the Haveri court thirty-five miles.

During the thirteen years ending 1882 the average number of suits decided was 3395. Except in 1871 when the total rose from 2303 in 1870 to 2800 in 1871, and in 1875 when the total suddenly rose from 2577 in 1874 to 3831 or an increase of nearly fifty per cent, during he six years ending 1875, the totals varied from 2303 in

Chapter IX.

CIVIL COURTS. 1846 - 1870.

1870 - 1883.

CIVIL SUITS. 1870 - 1882.

DISTRICTS.

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1870 to 3831 in 1875 with small rises and falls. Except in 1876 when the total fell from 4212 in 1878 to 4073 in 1879, during the next seven years, the totals show alternate rises and falls, the lowest total being 3832 in 1880 and the highest 4769 in 1876. Of the total number of cases decided, fifty-eight per cent have on an average been given against the defendant in his absence, the lowest percentage being forty-two in 1882 and the highest sixty-eight in 1872. For the first three years the figures of percentage are above the average by eight per cent in the first two years and ten per cent the third year. During the next eight years the proportion of cases decided in this way showed slight variations from the average, the rise or fall being generally one to three per cent and only in 1878 as much as five per cent. During the last two years there were unusual falls to forty-six or twelve per cent and to forty-two or sixteen per cent below the average, in 1881 and 1882 respectively:

Dhdriedr Ex-parle Decrees, 1870-1882.

Yean	Bults.	Decl- sions.	Percent-	Tear.	Buits,	Deci- sions.	Percent age.
1870 1871 1872 1873 1874 1875	2303 2800 2516 2403 2577 3831 4769	1631 1852 1720 1415 1512 2190 2919	66°4 66°1 68 0 56°7 58°6 57°1 61°2	1677 1878 1879 1890 1881 Total	4919 4073 8339 4624 8749	2131 2053 2454 1976 1809 1575	61:3 63:6 60:2 56:3 46:4 42:0 68:3

Of contested cases, during this period of thirteen years an aver age of 27.8 per cent have been decided for the defendant the percentage varying from 35:11 in 1875 to 18:05 in 1877, and the number keeping below 200 during the whole period except in 1875, 1881, and 1882 when the number was above 200. In 160 or 4:27 per cent of the suits decided in 1882 the decree was executed by putting the plaintiff in possession of the immovable property claimed. The number of this class of cases varied from 108 out of 4073 in 1879 to 397 out of 3831 in 1875. In 430 or 11.49 per cent of the 1882 decisions, decrees for money due were executed by the attachment or sale of property. Of these 372 or 9.94 per cent were executed by the sale of immovable property and 58 or 1.54 per cent by the sale of movable property. The number of the attachments or sales of immovable property varied from 1378 in 1872 to 372 in 1882, and of movable property from 220 in 1876 to fifty-three in 1880. During the thirteen years ending 1882 the number of decrees executed by the arrest of debtors varied from 127 in 1871 to sixteen in 1878. Except in 1871 when the number rose from 112 in 1870 to 127 and in 1876 when it rose to thirty-four from twenty-three in 1875, during the first nine years the number gradually dwindled from 112 in 1870 to sixteen in 1878. From sixteen in 1878 it rose to forty in 1880 and from forty it fell to seventeen in 1882. The following table shows that during the same thirteen years (1870-1882) the number of civil prisoners varied from forty-three in 1876 to fifteen in 1878:

Dhárwár Clvil Prisoners, 1870 · 1882.

	•			<u> </u>		Release.		
YBAR.		PRISOV- ERS.	DATS,	Satisfy- ing Docrees.	Creditors' Requests,	No Sub- sistence.	Disclos- ure of Property,	Time- Expired
1870 1871 1872 1673 1674 1876 1876 1877 1878 1879 1879 1879 1879 1870		25 20 23 18 31 43 20	2175 1102 990 766 568 1791 546 913 414 1035 943 1029 472	6.2212031	4645	34 21 13 14 15 23 31 14 8 8 10 20	. 2	111226534

Chapter IX.
Justice.
Civil Suits.
1880 - 1882.

The following statement shows in tabular form the working of the district civil courts during the thirteen years ending 1882:

Dhdrwdr Civil Courts, 1870-1882.

			1.	i	Und	OSTESTED	,	
Y	EAR.	Svits.	Average Value in C,	ALUE Doggod Dismissed Decreed Others		Total		
1670		2303 2500 2510 2193 2577 3831 4769 2460 4212 4073 8352 4021 3742	21-3 21 30-8 24-3 18-2 20-4 18-5 14-0 15-0 15-0 15-0 15-1 14-7	1631 1852 1726 1415 1612 2190 2019 2131 2082 1876 1869 1575	17 42 33 100 103 131 217 142 278 180 200 200	02 07 86 103 115 178 205 123 191 142 133 07 138	179 227 235 325 314 683 605 405 405 418 629 799	1787 2188 2088 1044 3082 8076 2801 3560 3106 2760 2801 2617

	1	Cont	ested.		1	Execu	1104.	
						Posses.		nent or roperty.
Yrae.	For Plaintiff.	For Defen- dant	Mixed	Total,	Arrest of Debtor,	sion by Decree Holder.	Immor- able,	Mov- able.
1871 1872 1873 1874 1876 1876 1877 1878 1870 1881	313 300 255 390 354 480 600 540 503 503 502 455 900 778	158 100 130 170 170 203 183 110 135 105 117 261 347	Not shown separately in the Administra-高ささ tion returns.	514 613 436 550 550 749 659 613 607 572 1163	112 127 88 72 00 23 81 17 16 18 40 22	113 163 160 151 156 207 161 133 119 108 116 130	752 1018 1378 097 625 051 1013 732 680 1065 732 480 372	150 151 191 127 104 168 220 01 63 55 78 59

Chapter IX.
Chapter IX.
Les SMALL CAUSE
COURTS,

Till the 1st of June 1869 when a redistribution of subordinate courts in Dhárwár was made and the Dhárwár and Hubli Small Cause Court was established, there was a sadar amin's court at Hubli. After the experience of six years it was found that there was not sufficient work for a separate Small Cause Court at Hubli and Dhárwár and the Court was abolished on the 31st of July 1875, and a second class subordinate judge's court was established at Hubli. The Small Cause Court business of Dhárwár town and neighbourhood is performed by the first class subordinate judge of Dhárwár, who is invested with the Small Cause Court powers under the provisions of section 28 of Act XIV of 1869.

REGISTRATION.

The work of Registration employs eleven sub-registrars all of them special or full-time officers. One of these sub-registrars is stationed at each sub-divisional head-quarters. In addition to supervision by the Collector as District Registrar, a special scruting under the control of the Inspector General of Registration and Stamps is carried on by the divisional inspector. According to the registration report for 1882-83 the gross registration receipts for that year amounted to £891 (Rs. 8910) and the charges to £698 (Rs. 0980) thus leaving a credit balance of £193 (Rs. 1930). Ut 4505, the total number of registrations, 4331 related to immovable property, 135 to movable preperty, and thirty-nine were wills. Of 4331 documents relating to immovable property were 1171 mortgage deeds, 1930 deeds of sale, forty-one deeds of gift, 942 leases, and 247 miscellaneous deeds. Including £102,202 (Rs. 10,22,020) the value of the immovable property transferred, the total value of the property affected by registration amounted to £107,103 (Rs. 10,71,030).

MAGISTRACY.

At present (1884) thirty officers share the administration of criminal justice. Of these, seven, including the District Magistrate, are magistrates of the first class and twenty-three are magistrates of the second and third classes. Of the magistrates of the first class three are covenanted European civilians, one is a European uncovenanted civil officer, and three are Natives including two mamlatdars exercising first class powers. The District Magistrate has a general supervision of the whole district, while, except the two mamlatdars each of the other four first class magistrates as assistant or deputy collector has an average charge of 1133 square miles and 22,027 people. In 1882, the five first class magistrates decided 185 original criminal cases and 124 criminal appeals. The average charge of the twenty-three second and third class magistrates, all of whom are Natives, was 197 square miles with a population of 38.387. In 1882 these magistrates decided 1798 original criminal cases. Besides their magisterial duties these officers exercise revenue powers as mamlatdars, mahalkaris, or head clerks of mamlatdars. In 1882-83, 1392 village headmen received average yearly emoluments amounting altogether to £4633 (Rs. 46,330). Of the whole number, twenty-four, under section 15 of the Bombay Village Police Act (VIII-of 1867) can in certain cases fine upto 10s. (Rs. 5). The others, under section 14, cannot fine and can imprison for only twenty-four hours.

There is no regular village police, the revenue headman or pátil as a rule performs the duties of a police headman. His office is generally hereditary and his pay is in proportion to the land revenue of the village under his charge. The headman is assisted by the shetsandis or watchmen who are generally paid in land, and as a rule are Bedars and Kurubars or shepherds.

The chief local obstacles to the discovery of crime and the conviction of offenders are the unwillingness of people to give information regarding crimes and offenders, the tampering with witnesses, the neighbourhood of Maisur in the south and of the Nizam's country in the east, and the existence of the Patvardhan jágir villages in the heart of the district. People are unwilling to give information because they are summoned as witnesses from their homes to attend distant courts; and the batta or allowance they are given does not make up for the cost and trouble to which they have been put. Gambling, receiving stolen property, sheltering criminals, assaults, riots, breach of trust, forgery, and occasional murders through spite are the characteristic crimes of the higher There are a few agrarian offences, such as plundering standing crops and setting hay, houses, and corn-bins on fire. A few crimes arise from the pressure of creditors. Cases of professional poisoning are unknown.

Korvárs or basket makers, Lavánás or carriers, and Vaddars or earth diggers, wander over the district and are more or less given to thieving. Besides these tribes gang robbers armed with stones and slings come from the neighbouring native states into the district, commit robberies, and return to their homes.

In the year 1882 the total strength of the district or regular police force was 733. Of these, under the District Superintendent, two were subordinate officers, 111 inferior subordinate officers, and twenty-five mounted and 594 foot constables. The cost of maintaining this force was for the Superintendent a total yearly salary of £960 (Rs. 9600); for the subordinate officers on yearly salaries of not less than £120 (Rs. 1200), and the inferior subordinate officers on yearly salaries of less than £120 (Rs. 1200), a total yearly cost of £2976 6s. (Rs. 29,763), and for the foot and mounted constables a cost of £6150 14s. (Rs. 61,507). Besides their pay a total sum of £240 (Rs. 2400) was yearly allowed for the horse and travelling allowances of the Superintendent; £463 (Rs. 4630) for the pay and travelling allowance of his establishment; £247 (Rs. 2470) for the horse and travelling allowances of subordinate officers; and £1125 4s. (Rs. 11,252) a year for contingencies and petty charges. Thus the total yearly cost of maintaining the police force amounted to £12,162 4s. (Rs. 1,21,622). On an area of 4534 square miles, and a population of 882,907, these figures give one constable for every six square miles and 1205 people, and a cost of £2 13s. 8d. (Rs. 26%) to the square mile, or 3d. (2 as.) to each head of the population. Of the total strength of 733, exclusive of the Superintendent, four, one officer and three men, were in 1882 employed as guards at district, contral, or subsidiary jates; seventy-seven, eleven Chapter IX.

Justice.

VILLAGE POLICE.

CRIME.

Criminal Classes.

Police. 1882. Chapter Lo Tne B Sh 18 Chapter IX.
Justice.
Police.
1882.

of them officers and sixty-six mon were engaged as guards over treasuries and lock-ups, or as escorts to prisoners and treasure; 575, ninety-three of them officers and 482 men, were stationed in towns, municipalities, and cantonmonts. Of the whole number, exclusive of the Superintendent, 367 were provided with firearms and forty-two with swords or with swords and batons; and 325 were provided with batons only; 246, of whom seventy-eight were officers and 168 men, could read and write; and 281 of whom twenty were officers and 261 men, were under instruction.

Except the Superintendent who was a European, the members of the police force were all natives of India. Of these fifty-four officers and 330 men were Muhammadans, eleven officers and twelve men Bráhmans, nine officers and thirty-three men Rajputs, three officers and eight men Lingáyats, twenty-seven officers and 178 men Maráthás, eight officers and forty men Hindus of other castes, and two officers and three men Christians.

Offences, 1874-1882,

The returns for the nine years ending 1882 show a total of 217 murders, sixty-three oulpable homicides, 221 cases of grievous hurt, 727 gang and other robberies, and 32,938 other offences. During these nine years the total number of offences gave a yearly average of 3796 or one offence for every 211 of the population. The number of murders varied from thirteen in 1880 and 1882 to sixty-three in 1877 and averaged twenty-four; culpable homicides varied from none in 1874 to sixteen in 1878 and averaged seven; cases of grievous hurt varied from fourteen in 1879 to thirty-nine in 1874 and averaged twenty-five; gang and other robberies varied from . forty in 1875 to 189 in 1877 and averaged eighty-one; and other offences varied from 2859 in 1874 to 6661 in 1877 and averaged 3660 or 96.4 per cent of the whole. Of the whole number of persons arrested the convictions varied from thirty-five per cent in 1874 to sixty-two in 1877 and averaged forty-seven per cent. The percentage of stolen property recovered varied from twenty-live in 1875 to forty-seven in 1876. The details are:

Dharredr Crime and Police, 1874-1882.

						Or	FEXC	es an	D Co	SVICE	10×8			•		
	Murde to	rs and Murd	Atte er,	mpt	1	Cult Iom	able cide		Gri	61 011	s Ru	rts,	Daeolt	ies and	Robbe	rics.
Year.	Cases.	Arrests.	Convictions.	Percentago.	Cases.	Arrests.	Convictions.	Percontago.	Cases.	Arresta.	Convictions.	Percentago.	Castes.	Arrests.	Convictions.	Percentage.
1874 1875 1876 1877 1878 1870 1880 1881	26 19 63 29 18	33 55 63 116 60 25 27 26 20	12 28 16 49 24 13 9 5	36 50 19 42 40 52 83 19	118000	16 12 13 93 18 6 7	;5.7;3.17 17.62 2.2:	51 58 23 58 46 58 28	39 18 28 28 27 14 17 20 18	62 27 54 66 26 15 22 30 33	22 11 22 23 20 12 11 17 23	85 40 40 85 77 80 57 70	43 40 106 189 93 47 76 71 63	60 69 250 750 183 78 81 55 41	8 16 67 233 94 18 10 17 23	11 23 26 81 51 23 12 30
10001	1 "	120	rig	40	63	101	42	80	221	335	161	48	727	1589	487	81

Dharwar Crime and Police, 1874-1882-continued.

		Offe	CES AND	Convictio	hs—cont	inued.	l			
Ì	Other C	ffences.		Tota	d. Property.					
Year.	Cases Arrests.	Convictions.	Cases.	Arrests.	Convictions.	Percentage.	Stolen.	Recovered.	Percentage.	
1874 1875 1876 1877 1878 1880 1881 1882	2859 3184 3818 3818 4607 6661 4069 4069 4028 8002 3028 8002 3415 3277 32,938 41,052	1438 40 1808 40 0202 05 2808 60 1850 52 1559 45 1415 41 1463 38	2960 3279 3979 6058 4233 3116 3112 3158 3373	4324 4065 5016 10,545 4721 8876 3571 3536 3868	1510 1498 1920 6510 2763 1903 1591 1466 1530	35 37 80 62 59 52 45 41 40	6595 8211 8080 11,140 6741 6027 6194 4958 62,340	1781 2018 3773 5082 3007 1724 1637 1690 1712 22,274		

Chapter IX.
Justice.
OFFENCES.
1874-1882.

Besides the lock-up at each mamlatdar's office, there is a district jail at Dhárwár and three subordinate jails, one each at Shevgaon Karajgi and Ron. The number of convicts in the Dharwar jail on the 31st of December 1882 was 207 of whom 171 were males and thirty-six females. During the year 1883, 478 convicts, of whom 399 were males and seventy-nine females, were admitted, and 467, of whom 400 were males and sixty-seven females, were discharged. During the year the daily average of prisoners was 199 and at the close of the year the number of convicts was 218 of whom 170 were males and forty-eight females. Of these 338 males and fifty females were sentenced for not more than one year, seventeen males were for over one year, and not more than two years; five males were for more than two years and not more than five years; and none were for more than ten years. Eight males and two females were under sentence of transportation and six male prisoners were sentenced to death. The daily average number of sick was 48. During the year four prisoners died in hospital. The total yearly cost of diet was £323 4s. (Rs. 3232) or an average of £1 12s. $1\frac{1}{2}d$. (Rs. $16\frac{1}{16}$) to each prisoner.

Jails.

Chapter La THE B

CHAPTER X.

FINANCE.

Chapter X. Finance.

THE earliest balance-sheet of the district as at present constituted is for 1868-69. Exclusive of £54,760, (Rs. 5,47,600), the adjustment on account of alienated lands, the total transactions entered in the district balance-sheet for 1881-82 amounted under receipts to £387,336 (Rs. 38,73,360) against £358,605 (Rs. 35,86,050) in 1868-69 and under charges to £482,307 (Rs. 48,23,070) against £381,561 (Rs. 38,45,610). Leaving aside departmental miscellaneous receipts and payments in return for services rendered such as post and telegraph receipts, the revenue for 1881-82 under all heads, imperial, provincial, local, and municipal, came to £308,477 (Rs. 30,84,770), or, on a population of 882,907, an individual share of 6s. 10ad. (Rs. 3 as. 6a). During the last fourteen years the following changes have taken place under the chief heads of receipts and charges.

Land Revenue receipts, which form 73'42 per cent of the entire revenue of the district, have risen from £183,784 (Rs. 18,37,840) to £225,831 (Rs. 22,58,310), and charges from £32,629 (Rs. 3,26,290) to £45,616 (Rs. 4,56,160). The following statement shows the land revenue collected in each of the twenty years ending the 31st of March 1882: Land Rerenue, 1868-69-1881-82.

Y	ear.		£,	£			
1808-69 1860-70 1870-71 1871-72 1872-73 1873-74 1874-75	*** *** *** * *	11 12 13 13 14 14	183,781 188,547 183,894 181,817 183,790 182,051 196,003	1575-76 1876-77 1577-78 1878-79 1870-50 1830-81 1681-62	***	1 2 2 c 1 4 1	204,097 201,649 209,213 222,272 233,010 239,631 225,831

STAMPS.

EXCISE.

Stamp receipts have fallen from £16,430 (Rs. 1,64,300) to £10,444 (Rs. 1,04,440), and charges from £634 (Rs. 6340) to £321 (Rs. 3210).

During the five years ending 1876-77 the excise revenue of Dharwar averaged £23,262 (Rs. 2,32,625). The revenue suffered heavily from the effects of the famine of 1876-77 from which it did not fully recover until 1881-82. In 1877-78 the receipts fell to the low figure of £10,962 (Rs. 1,09,620), and after a sluggish progress during the next three years, rose to £19,744 (Rs. 1,97,440) in 1881-82 and to £24,149 (Rs. 241,490) in 1882-83:

Six shops for the sale of foreign imported liquor are each licensed on payment of a fee of £5 (Rs. 50); one of these was first opened in 1880-81. The country liquor revenue is realized by the sale of yearly farms by sub-divisions. The number of shops and their localities are announced at the time of the sale, and the farms

¹ This total includes the following items: £257,126 hand revenue, excise, assessed taxes, forest, and opium; £12,720 stamps, justice, and registration; £11,450 education and police; £27,181 local and municipal funds; total £303,477.

are then sold to the highest bidders. Formerly some shopkeepers were allowed to sell country spirit as well as palm-juice or toddy; others were allowed to sell country spirit alone or toddy alone. In 1881-82 toddy farms were separated from the spirit farms. In that year the toddy farm realized £5759 (Rs. 57,590) and £7312 (Rs. 73,120) in 1882-83, and the spirit farm £13,461 (Rs. 1,34,610) in 1881-82, and £16,206 (Rs. 1,62,060) in 1882-83. From the 1st of August 1883, a tree-tax of 2r. (Re.1) has been imposed on each toddy tree tapped for the fermented juice, and the toddy farm has been sold on condition that the farmer guarantees a certain minimum revenue to be paid in the shape of a tree tax on the trees which he taps. From the 1st of August 1884 Government have also decided to introduce the central distillery system in the Dharwar district, and to subject the liquor issued from the distillery to a still-head duty of 5s. (Rs. 21) the gallon of 25° under proof,1 that is under London proof, and of 2s. 8d. (Rs. 13) the gallon of 60° under proof, leaving the farmer to sell the liquor at any prices he pleases up to 9s. (Rs. 41) the gallon of liquor 25° under proof and 5s. (Rs. 21) the gallon of liquor 60° under proof. The stillhead duty rates on liquor issued for sale in the towns of Dharwar and Hubli will be somewhat higher, namely 5s. 6d. (Its. 23) and 2s. 111d. (Rs. 135), but the highest selling prices will be the same as in the rest of the district. One condition of the next farm will be to require the farmer to build a distillery according to a plan approved by the Abkari Commissioner and to hand it over to Government on receipt of cost as estimated by the Executive Engineer.

The number of liquor shops in 1882-83 was 208 of which 107 were for the sale of spirits and 101 for the sale of toddy. Formerly there were 165 shops of which sixty-four were for spirits, fifty-eight

for toddy, and forty-three for both spirits and toddy.

From the year 1881-82 to prevent smuggling the excise management of 110 villages belonging to native states adjoining the district has been placed in the hands of the Collector the Chiefs receiving yearly compensation at fixed rates. The excise management of these villages is conducted on exactly the same principles as that of the district villages. The intoxicating drugs revenue amounted to £600 (Rs. 6000) in 1883. The drugs retailed are chiefly bháng or drinking hemp and gánja or smoking homp, imported from Sholapur and from Belgaum. No special establishment is employed in Dharwar for the collection or protection of the excise revenue.

Law and Justice receipts; chiefly fines, have risen from £1133 (Rs. 11,330) to £1525 (Rs. 15250), and charges, owing to an increase in the pay of the offices and staff, from £10,741 (Rs. 1,07,410) to £12,560 (Rs. 1,25,600).

Forests receipts have risen from £2288 (Rs. 22,880) in 1868-69 to £5967 (Rs. 59,670) in 1881-82, and charges from £1638 (Rs. 16,380)

to £3525 (Rs. 35,250).

Chapter X. Finance. Excise.

JUSTICE.

FOREST.

¹ The alcoholic strength of liquor is denoted by degrees over or under the standard of London proof which is taken as 100 degrees. Thus 25° U. P. that is under proof, is equivalent to 75 degrees of strength, 60° U. P. is equivalent to 40° degrees of strength; and 25° O. P. or over proof, is equivalent to 125° degrees of strength.

Chapter X.
Chapter Finance.
Le Assessed
TAXES.

The B St The following table shows the amount realised from the different assessed taxes levied between 1868-69 and 1881-82. Owing to the variety of rates and incidence it is difficult to make any satisfactor comparison of the results:

Dhártoár Assessed Taxes, 1868-1881.

YEAR.	Amount.	Year.	Amount.
Profession and Trade Tax. 1868-60 1869-70	£ 3005 10,458	1874-76 1875-70 1870-77	£ 1
Income Tax. 1870-71 1871-72 1872-73 1873-74	12,823 8411 2440 141	License Tax 1878-79 1879-80 1880-81 1881-82	18,024 12,251 6212 6078

 N_0 tax was levied between 1873-74 and 1877-78. The amounts of £141 (Rs. 1,410) and £1 (Rs. 10) received in 1873-74 and 1874-75 are of account of previous years.

Customs.

Opium receipts have risen from £694 (Rs. 6940) in 1868-69 to £871 (Rs. 8710) in 1881-82. The increase is due to increase in the amount realised on account of fees for licenses to sell opium by

Military.

Military receipts have risen from £515 (Rs. 5150) to £1609 (Rs. 16,090), and charges have fallen from £14,673 (Rs. 1,46,730) to £14,651 (Rs. 1,46,510).

Mint,

The amount of £10 (Rs. 100) received during 1881-82, represents the sale proceeds of cut copper coins. Mint charges amounted to £40 (Rs. 400).

Post.

Post receipts have risen from £2358 (Rs. 23,580) to £16,894 (Rs. 1,68,940) and post charges from £1562 (Rs. 15,620) to £9431 (Rs. 94,310). The receipts and charges shown in the 1881-32 balance sheet, besides letters books and parcels, include money received and paid under the money order system.

Telegraph.

Telegraph receipts have risen from £330 (Rs. 3300) to £392 (Rs. 3920), and charges have fallen from £1181 (Rs. 11,810) to £786 (Rs. 7860).

Registration.

Registration receipts have fallen from £985 (Rs. 9850) to £751 (Rs. 7512), and charges from £844 (Rs. 8440) to £653 (Rs. 6590).

Education,

Education receipts, including local funds, have risen from £4415 (Rs. 44,150) to £11,061 (Rs. 1,10,610), and education charges from £7007 (Rs. 70,070) to £14,681 (Rs. 1,46,810).

Police receipts have risen from £349 (Rs. 3490) to £389 (Rs. 3890), and police charges from £11,549 (Rs. 1,15,490) to £389 (Rs. 3870)

Police,

£16,387 (Rs. 1,63,870).

Medicine.

Medical receipts have risen from £57 (Rs. 570) to £246 (Rs. 2480), and medical charges have fallen from £2362 (Rs. 23,620) to £2338 (Rs. £3,380), and jail charges from £2655 (Rs. 26,550) to £1765 (Rs. 17,650).

Transfer.

Transfer receipts have fallen from £110,262 (Rs. 11,02,620) to £79,763 (Rs. 7,97,630) and transfer charges have risen from £251,056 (Rs. 25,10,560) to £294,507 (Rs. 29,45,070). The increase

under receipts exclusive of each remittances is due to receipts on account of local funds and to savings bank deposits. The increase under charges is due to a large surplus balance remitted to other treaturing and to the recomment of deposits.

treasuries, and to the repayment of deposits.

In the following balance sheet, the figures shown in black type on both sides under 1881-82 are book adjustments. On the right side, the item of £54,760 represents the additional revenue the district would yield had none of its lands been alienated. On the debit side, the item of £13,752 under land revenue and £3603 under police are the rentals of the lands granted for service to village headmen and watchmen. The item of £37,405 shown under allowances and assignments represents the rental of lands granted to hereditary officers where services have been dispensed with, and of religious and charitable land-grants.

Cash allowances to villago officers and servants are treated as actual charges and debited to Land Rovenue. No district officers

now render service:

Dharvar Balance Sheet, 1868-69 and 1881-82.

17/1/17	irar Isala	ner onect,	1868-69 and 1881-82.		
Recents			Currare	•	1
Herd.	Intra	1531 52,	Head.	10 1- 69	143142
Land Resenue	£ 151,781	£ 51,760	IADI Resendo	82,629 C	£ 45,616 13,752
Stamps	27,470 27,072 0 4177	10,444 19,770 1627	Etamps Excise Justice	631 126 6 12,310	521 72 12,60
Forests	2254 2405 (31	(267 (679	Foresta Are seel Tisca Allowances	1639 105 1600	8125 8721
Interest	1020 1021 200	201 471 6711	Penelona Pechelastical	1905 21	37.405 571.1 701
Military Mint Post	615 2258	16,531 10 16,63	Militars	7174 72,7×6 14,673	14,651 67,941 671,651
Telegraph Resistration Digention	219 P-5 H15	771 771 11,061	Mint Post Telegraph	1/62 1151 844	40 9131 750 653
I olice Medicine Jally	517 67 1123	219 219 602	Registration . Education . Police	7607 11,619	14,641 16,357 3603
Sale of Books	***	9.2	Medicine Jails Office Rents	2303 2155	2503 1705 28
			Printing	20%	19
Total	219,313	207,673	Total	183,605	187,600
Transfer Hems. D. preds and Loons Cash ite matanees Remittance a & hopply Bills. Local Funds	11,121 (9,011 14,259 16,222	27,3-0 16,669 20,221 10,714	Transfer Hems. Deposits and Lorus Cash Ik mittanees Ik mittanees & Supply Bills. Local Funds		23,046 221,057 43,132 4301
Total	110,262	79,763	Total	251,050	201,007
Grand Total	258,605	297,336 51,760	Orand Total	351,561	492,307 51,760

a This total is made of £2103 amin's establishment fund which was abolished in 1870 71, £1224 on adjustment, and £1123 justice receipts for 1865 CT.

6 This sum is made of £1023 amin's establishment fund charges and £10,741 justice charges for 1868 60.

REVENUE OTHER THAN IMPERIAL.

District local funds, which since 1863 have been collected to promote rural education and supply roads, water, drains, rest-houses, dispensaries, and other useful works amounted in 1881-82 to £26,361 Chapter X. Finance.

BALANCE SHEETS, 1865-1869 AND 1881-82.

LOCAL FUNDS.

Chapter Lis Finance.

The B Local Funds.

(Rs. 2,63,610), and expenditure to £31,494 (Rs. 3,14,940). The local fund revenue is derived from three sources, a special cess of one: sixteenth in addition to the land tax, the proceeds of certain subordinate local funds, and certain miscellaneous items. The special land cess, of which two-thirds are set apart as a road fund and the rest as a school fund, in 1881-82 yielded a revenue of £17,619 (Rs. 1,76,190). The subordinate funds, including a cattle pound fund, a toll fund, a ferry fund, and a school-fee fund, yielded £3678 (Rs. 36,780). Government municipal and private subscriptions, interest on Government securities and receipts of the School of Industry amounted to £4499 (Rs. 44,990), and miscellaneous receipts, including certain items of land revenue, to £564 (Rs. 5640). In 1881-82 this revenue was administered by district and subdivisional committees partly of official and partly of private members. The district committees consist of the Collector, the assistant and deputy collector, the executive engineer and the educational inspector as official, and the proprietor of an alienated village and six landholders as non-official members. The sub-divisional committees consist of an assistant collector, the mamlatdar, a public works officer and the deputy educational inspector as official, and the proprietor of an alienated village and three landholders as nonofficial members. The sub-divisional committees bring their local requirements to the notice of the district committee who prepare the yearly budget.

For administrative purposes, the local funds of the district are divided into two main sections, one set apart for public works and the other for instruction. The receipts and disbursements during the year 1881-82 were:

Dhárwár Local Funds, 1881-82. Public Works.

· · · · · · · · · · · · · · · · · · ·	1		Amount.
Recents.	Amount,	Charoes,	Allouis.
Balance Two-thirds of Lond Cess Tolls Ferries Cattle-pounds Contributions Miscellaneous Quarry Fees	1103 877 022 1201 486 57	Establishment New Works Repairs Medical Miscellaneous Balanco Total	9641 4434 188
Total	21,260	10081	٠, ۵4,400

INSTRUCTION,

Receipts.	Amount.	Charges.	Amount
Balance One-third of Land Cess . School-fee Fund	6878 1276 2477 204 21 78	Establishment	1235 2036 609

Since 1863, the following local funds works have been carried out. To improve communications about 522½ miles of road have been made and kept in order, and partly planted with trees. To improve

the water-supply, 175 ponds and reservoirs, ninety wells, seventy-five cisterns and seventeen water-courses have been either made or repaired. To help village instruction, seventy-nine schools, and for the comfort of travellers, thirty-five rest-houses and six staging bungalows have been either built or repaired. Besides these works one cholera and infectious diseases hospital, 177 cattle pounds, sixty-one châvdis or village offices and eighteen toll-houses have been either made or repaired.

Chapter X. Finance.

MUNICIPALITIES.

In 1881-82 of nine municipalities, six in Dhárwár, Gadag-Betgeri, Hubli, Navalgund, Nargund, and Ránebennur were established under Act XXVI of 1850. The remaining three of Byádgi Hángal and Háveri were established under Act VI of 1873. Since 1881-82 the Hángal municipality has been abolished. In 1881-82 each of these municipalities was administered by a body of commissioners with the Collector as president and the assistant or deputy collector in charge of the sub-division as vice-president. The Dhárwár and Hubli municipalities have since been made city municipalities. In 1881-82 the district municipal revenue amounted to £10,467 (Ra. 1,04,670), of which £1396 (Rs. 43,960) were recovered from octroi dues, £2226 (Rs. 22,260) from house-tax, £792 (Rs. 7920) from toll and wheel taxes, and £3053 (Rs. 30,530) from other sources.

The following statement gives for each municipality the receipts, charges, and incidence of taxation during the year ending the 31st March of 1882:

Dhdrudr Municipal Details, 1881-82.

	1		I	Reci	illiy.			
Naur.	Deta.	Profes	Octrol	House Tax.	Tolls and Wheel lax	Miscel- laneous.	Total.	INCI DYNCE
Dhirsár Hubli Natalgund Narquod Gadag-Batgeri Hanchennur Hater Hangal	1st Aug. 1955 19th Dec. 1870 2sth Jan 1871 1st May 1959 1st Jan. 1859 1lth Sept. 1879 10th Sept. 1879	20,471 36,611 7512 7653 17,001 10,749 6490 4116 6272	£ 710 1497 181 281 711 253 212 518	£ 702 628 155 100 423 158 00 50	£ 203 (32	£ 1234 459 700 52 439 49 42 46 13	£ 27.11 3055 10 % 4 10 1578 513 370 614 63	2 0 1 8 2 8 1 1 1 10 0 11 1 5 3 2 0 3
1	Total	! .	4336	2226	792	3053	10 167	٠.

	l	CHARGPS.									
Nave.		1	<u> </u>		Worl s.		Miscel-	TOTAL.			
	Staff.	Safety.	Safety. Health.		New,	Repairs.	lancous.				
Nargund Gwlig Helgeri Ranchennur Havri Bysdgl	510 115 75 813 167	179 118 4 12 10 0	£ 1269 1766 417 124 630 176 173 161	£	£ 123 203 81 68 47 25 305	£ 172 110 20 2 120 80 2 	C 015 574 83 239 170 41 8	£ 3085 3371 720 619 1470 613 351 050			
Matal	2146	357	4093	101	920	626	1757	10,701			

Chapter Ls True B Str 15

CHAPTER XI.

Chapter XI.
Instruction

In 1882-83 there were 356 Government schools or an average of one school for every four inhabited villages with 29,711 names and an average attendance of 19,206 or 7.93 per cent of 242,943 the whole population between six and fourteen years of age.

STATE.

Under the Director of Public Instruction and the Educational Inspector Southern Division, the schooling of the district was conducted by a local staff 900 strong. Of these one was a deputy education inspector drawing a yearly pay of £180 (Rs. 1800), with general charge over all the schools of the district except the high school, the two first grade angle-vernacular schools, the training college, the juil school, the police school, and the school of industry were under the inspection of the deputy educational inspector. The deputy educational inspector was aided by two assistants each drawing a yearly pay of £90 (Rs. 900); and the rest were masters and assistant musters.

Cost.

Excluding superintendence charges, the total expenditure on account of these schools amounted to \$14,559 (Rs. 1,45,590) of which £3597 (Rs. 35,970) were paid by Government and £10,962 (Rs. 1,09,620) from local and other funds.

Instruction

Of these Government schools one was a training college, one a high school teaching English and Sanskrit up to the matriculation standard, and having a drawing class attached to it, one an industrial school, one a police school, and one a jail school; two were first grade anglo-vernacular schools, one teaching English up to the fifth standard and the other up to the third standard; and eight were second grade anglo-vernacular schools, that is vernacular schools with an English class teaching English up to the third standard; and the remaining 311 were vernacular schools of which 324 were boys schools and seventeen girls school. Of the 341 vernacular schools 331 taught Kauarese, three taught Maráthi, and four taught Hindustáni.

PRIVATE SCHOOLS

Besides the 356 Government schools there were thirty-six private schools. Of these fifteen were aided by Government and twenty-one were jägirdärs or estate-holders schools inspected by the Education Department. Of the fifteen aided schools eight were under the Basel German Mission, five boys schools eight were under the Basel German Mission, five boys schools and three girls schools; one Dhárwár European and Eurasian girls school supported by the European community of Dhárwár; and six boys schools. Of the five Mission boys schools one taught Kánarcse and English up to the fifth standard, and the remaining four boys schools and the three girls schools taught Kánarcse to the fourth standard. The European and Eurasian girls school taught the vernacular first and second standards. Of the twenty-one inspected schools six wore; in the Sávanur State, one anglo-vernacular boys school teaching

¹ It was closed on the 1st of September 1883. Boys were taught earpentry, smith's work, fitting, and turning. They were also taught to read and write.

English up to the third standard, four boys vernacular schools, and one girls school teaching four vernacular standards; ten in the Lakshmeshvar division of Miraj one anglo-vernacular teaching English to the third standard, six boys vernacular schools and three girls schools, all teaching the four vernacular standards; and the remaining five in the Miraj Mala state, four boys vernacular schools and one girls school all teaching the four vernacular standards.

As early as 1826 two Maráthi schools were opened one at Dhárwár and the other at Hubli. In 1835 two Kánarcse schools were opened in the same towns; and a third Kanarese school at Ranebennur in 1836. In 1818 the first English school was opened at Dharwar, In 1855-56 there were fourteen Government schools, of which twelve were vernacular schools, one an English school, and one a training college, with 1110 names on the rolls and an average attendance of 1226. In 1865-66 the number of schools had risen to forty-nine with 4267 names on the rolls and an average attendance of 3391. Of these forty-nine schools forty-eight were vernacular schools and one was an English school. In 1875-76 the number had further risen to 1611 with 8926 names on the rolls and an average attendance of 6774.65. In 1879-80 the number of schools had reached 300 with 13,856 names and an average attendance of 9014.80. Compared with 1855-56 the returns for 1882-83 give an increase in the number of schools from fourteen to 356, in the names on the rolls from 1410 to 29,711, and in the average attendance from 1226 to 19,206. Besides these Government schools thirty-six aided and inspected schools were founded by estate-holders or jágirdárs, private persons, and missionaries.

In 1867 the first girls school was opened at Dhárwár. During the six years ending 1873-74 the number of girls schools rose to eleven in 1873-71 with 429 names on the rolls and an average attendance of 295-2. Of these two were maintained by the Basel German Mission Society and the rest were Government schools. In 1880 the number was twenty with 979 names on the rolls and an average attendance of 625. Of these schools three were Basel German Mission Schools, two estate or jágir schools, one each at Lakshmeshvar and Sávanur, and the rest were Government schools. In 1880 four new girls schools were opened, and in 1881-82 the number of schools reached twenty-four, of which seventeen were Government, three Mission, and four estate schools, with an attendance of 1484. In 1882-83 two new estate schools were opened and the attendance rose from 1481 in 1881-82 to 1859 in 1882-83. Besides these separate girls schools 2450 girls attend boys schools, so that the number of girls attending school is 4309.

The 1881 census returns gave for the chief races of the district the following proportion of persons able to read and write. Of 779,875, the total Hindu population, 15,491 (males 15,031, females Chapter XI.
Instruction.

Progress, 1826 - 1883,

Girls' Schools.

READERS AND WHITEES.

t Of 161 ichools, one was a High School, one a training college, one a school of industry, three were first grade angle-vernacular schools, one a second grade angle-vernacular school, fourteen were girls schools, one was a jul school, and 112 were vernacular schools.

DISTRICTS.

Chapter XI.

Chaptel Instruction.

Le Readers and Writers.

Ste

460) or 1.98 per cent below fifteen, and 2815 (males 2791, females 24) or 0.36 per cent above fifteen were under instruction; 1286 (males 1214, females 72) or 0.16 per cent below fifteen and 28,751 (males 28,536, females 215) or 3.68 per cent above fifteen were instructed: 275,599 (males 133,100, females 142,499) or 35.33 per cent below fifteen and 455,933 (males 209,526, females 246,407) or 5846 per cent above fifteen were illiterate. Of 100,622, the total Musalman population, 1370 (males 1323, females 47) or 1.36 per cent below fifteen and 236 (males 226, females 10) or 0.23 per cent above fifteen were under instruction; 109 (males 97, females 12) or 0.10 per cent below fifteen and 1924 (males 1879, females 45) or 1.91 per cent above fifteen were instructed; 37,537 (males 18,596, females 18,941) or 37.30 per cent below fifteen and 59.446 (males 28.478, females 30,968) or 59.07 per cent above fifteen were illiterate. Of 2356 Christians, 279 (males 118, females 161) or 11'84 per cent below fifteen, and 38 (males 27, females 11) or 1.61 per cent above fifteen were under instruction; 26 (males 17, females 9) or 1:10 per cent below fifteen and 274 (males 195, females 79) or 11:62 per cent above fifteen were instructed; and 663 (males 342, females 321) or 28-14 per cent below fifteen and 1076 (males 502, females 574) or 45.67 per cent above fifteen were illiterate:

Dharwar Education, 1881.

٠		Has	DUB.	Mrsa	LYA'KS.	Corestans.		
Agr.		Males.	Females.	Males.	Females.	Males.	Fèmales	
Under Instruction	m.						İ	
Below Fifteen Above Fifteen	***	15,031 2701	460 24	1323 226	47 10	118 27	161 11	
Instructed.								
Below Fifteen Abovo Fifteen	***	1214 28,530	79 216	97 1879	12 45	17 105	70	
Milterate.							•	
Relow Fifteen Above Fifteen		209,520	142,407 246,407	18,596 23,478	18,011 30,963	342 502	321 574	
Total		\$00,108	389,077	50,509	50,023	1201	1165	

RACE.

Before 1855-56 no returns were prepared arranging the pupils according to race and religion. The following statement shows that of the two races of the district the Hindus have the larger proportion of their boys and girls under instruction:

Pupils by Race, 1855-56 and 1882-83.

1	185	5-56.	1852-83.				
Race.	Papils.	Per- contage of Pupils.	Pupils.	Per- centage of Pupuls.	School-going Popula- tion. 212,644 28,302	Per- centage on School- going Popula- tion.	
Hindus Musalmans	1204 107	92:38 7:04	29,061 5658	88:48 11:52	213,644 28,892	13 12 12 56	
Total	1401	100	31,714	100	242,236	13-00	

Of 28,136, the total number of pupils in Government boys schools at the end of March 1883, 3435 or 12.20 per cent were Bráhmans; 204 Kshatriyás, and fifty Ráyasth Prabhus; 13,858 or 49.25 per cent Lingáyats; 486 or 1.72 per cent Jains; 593 or 2.10 trading castes including 304 shopkeepers; 1067 or 3.78 per cent Kunbis; 1597 or 5.67 per cent craftsmen; 480 or 1.70 per cent labourers; 297 or 1.05 per cent depressed classes; and 2730 or 9.02 per cent other Hindus; 3298 or 11.72 per cent Musalmáns; thirty-seven Nativo Christians, three Pársis, and one Eurasian. Of 1575, the total number of girls on the rolls in 1882-83 in the seventeen Government girls schools 1506 or 95.61 per cent were Hindus, sixty-six or 4.19 Musalmáns, two Pársis, and one a Native Christian.

The following tables, prepared from special returns furnished by the Educational Department, show in detail the number of schools and pupils, the school fees, and the cost to Government: Chapter XI.
Instruction.
Caste.

Schools, 1855-1883.

Dhdrwar School Return, 1855-56, 1865-66, and 1882-83.

	1	Schools			Purils.				
CLASS.	l	Hindus.							
	1655-60	1503-66	1832-83	1855-50.	1865-66	1832 SJ			
Government.									
Training College			1 1	0	••	91			
High School Angle vernacular Schools .		l **;	10	60		431			
Vernacular Schools		43	ร์เร	1235	3915	25,470			
Industrial School			1 2	1		31			
Police and Jall Behools	•••		2		•••	80			
Alded.	1	}] _]	}]			
English	***	***	13		l •••	70 333			
Vernacular		j	13			339			
Inspected.		į		Į	Ì	1			
			2		l	97			
Vernacular	·} •		19	1 .		1252			
Total .	14	40	202	1291	3935	28,001			

			Perus-continued.						
CILLEY.	ent.		Mushmins.			l'ársisand Others.			
			1855-50.	1865-66.	1892 83.	1856-50.	1863-66.	1892-83.	
Gorcrams Training College High School Anglo vernaculur By Vernacular Behool Industrial Schools Police and Jail Sch	chools		106	310	13 2 15 3231 21 52	. : : 0 : : :	 6 8	:: 2 30 1 2	
Aided. English Vernacular)** 1+1	•••		 	13 40	***	***	13 179	
Inspected English Vernacular	t. :::	•••	***		10 227	***	***	***	
	Total	•••	107	823	3653	0	0	236	

DISTRICTS.

Chapter XI. Instruction.

Chapter

THE B Ste 18

Ls

Semona, 1853-1883.

District School Return, 1857-66, 1863-66, and 1882-83.

	Pti	ils-e-nti-	wel.				
CLAFY		Total.			ALEUfor VLASADIACS		
	1433-59.	1º65-ea	1512 83,	16°3 (A.	1905-00. 1502		
Training Colorminent Training Colorminent Training Colormine Illich ichools Analo ictriseur's Schools Analo ictriseur's Schools Industrial Schools Industrial Schools Aided, English Vernacular Ingreted, English Vernacular	 1211 1211 0	1:0 4:c7 ::	107 107 107 143 25,137 55 161 05 253	#6 1850	78 3215	90; 115 54: 1170 414 4171 4171	
" -			1875	::	=	jų.	
Tolal	1610	tir:	31,020	1239	2231	លាខភ	

Care		Pre		CONT	TO PACT	Pin.	1	Receipte.			
) care	15356	197567	1-2-22	15350	150.0	15.30					
Geternment	_					_	1535.50	المنتاء	1 15528		
Training Co leve Illán fechacis Anglos erra ac ul ar Felos la Vernacular Felos Industrial Rejood Folice and Jail & hoc- Louise Adde L Trailin Vernacular Ingested Fragilis Fragilis Fragilis Fragilis Fragilis Fragilis		Je	Leto ex. filter Lettocy. Lettocy. Lettocy. Lettocy. Lettocy. Lettocy. Lettocy.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 13 5		223	£	£ 203 cts 157 150 -		

_		· Recrure-continued.									
CLASS.	Local Com.		Municipalities.			Private.					
	1865-ea	1892-63	1555-26.	1565-60,	18%2 53	1883 SA	1863-66.	15524			
Gorranent. Training College High Schools Auglos-terneular Behools Vernacular Rehools Industrial School Police and Jail Schools Linglish Mided. English Linglish		£ :: :: ::	£	£	130			£ 453			
Verinscolar "Total		***	=	::	=						
TOUR! IN	410	1503	14	110	143	65	678	702			

Didriedr School Return, 1855-56, 1865-66, and 1882-83-continued.

· · · · · · · · · · · · · · · · · · ·	T								
			trerity.	L'alexalier.					
Clars.	Fee.				Total.		Instruction.		
	1855 50.	1565-f6.	1892-83	1855-66	18C5 GG	1882 83.	1835-56.	1805-66	1832 83.
Government, Training College High School Anglo-Vornacular	£	£	£	E _G	£	£ 895 979	£	£	£ 751 805
Schools Vernacular Schools Industrial School Police and Jail School	17 93	45 813 	291 1671 	123 853	136 3:37 	629 10,419 2007	97 316	126 1916	628 8701 803
Aided. English Verracular	***	:.	80 13	:		190 272		:	314 208
Inspected. English Verracular				::	:::	·:	:		
Total	110	8:3	2353	482	3173	15,429	419	2072	12,400

Chapter X	[.
Instruction	ŀ
Sспоотя, 1855-1883.	

			Exr	Cost to						
CLASS.	Buildings.		Scholar ships	Total.			Government.			
		1°65-66	1652-83.	1552 87	1835 56.	1805-00	1852 83.	1835 56.	1865-66.	1592-83,
Government, Training College High School	alar olar	703	£ ::: 1126 :::	£ 762 145 10 ii6	£ 6 97 316	£ 126 2741	£ 1613 1040 639 9527 910	£ 6 32 255	£ 1612	£ 885 613 197 1613 160
Aided. English Vernacular Inspected,	••	***	***	<u></u>	::	***	314 305	•••		iio
English Vernacular	••								-::	***
Tota	1	703	1120	1033	419	2570	14,859	293	1031	8597

	Cost to—continued.									
CLASS.	Local Coss.		Other Funds.			Total.				
Caron	1865-66	1832 S3.	1655-59	1FG5 66.	1652 53.	1855 50.	1865 66.	1892 83.		
Government. Training College High School	***	£ 629 118	£	£	£ 000	£ 6	£	£ 1513 1040		
Anglo-Vernacular Schools Vernacular Schools Industrial School Folice and Jai(Schools	iö	10 6509 51	65 91 	1116 ::.	441 1075 718	07 816 	126 2741 	033 0327 919		
Aided. Fnglish Vernacular		20	:::	***	314 169	pot 200	•••	314 303		
Inspected. Finglish Vernacular	::		<u></u>	==	:::	***				
Total	36	7336	165	1173	3626	419	2870	14,659		

Chapter XI.

Instruction.

Town Schools.

Chapter La The B A comparison of the 1882-83 provision for teaching the town and country population gives the following result:

In Dharwar in 1882-83 eighteen Government schools had 2179 names on the rolls and an average attendance of 1481.5. Of these schools one was a training college, one a high school, one a second grade anglo-vernacular school, one an industrial school, one a police school, one a jail school, one a Maráthi school, one a Hindustáni school, two girls schools, one teaching practising school attached to the training college, and the rest were Kanarese boys schools. The Dharwar training college was established at the cost of Government: At the end of March 1883, 107 names were on the rolls. The num: ber of scholars, almost all of whom board at the college, depends on the demand for teachers in the education department, no more than the required number being admitted. The college has a building of its own which was made in 1875. The average yearly cost of each pupil in the training college was £15 14s. (Rs. 157), in the high school £6 4s. (Rs. 62), and in the school of industry £20 14s. (Rs. 207). In the other schools the cost was 9s. 43d. (Rs. 435). Since 1872 nine pupils a year have on an average passed the University Entrance Examination from the Dharwar high school. In addition to the Government schools in 1882-83 three private schools were maintained in the town of Dharwar by Missionaries with 214 names on the rolls and an average attendance of 182. The average yearly cost² for each pupil varied from £2 10s. to 8s. (Rs. 25 - 4) Besides these there was one Eurasian girls school with ten names on the rolls. In Navalgund in 1882-83 one second grade anglovernacular and two Kánarese schools had 231 names on the rolls; an average attendance of 158, and an average yearly cost for each pupil of 9s. 6d. (Rs. 43).

In Nargund in 1882-83 four schools had 269 names on the rolls, an average attendance of 200, and an average yearly cost for each pupil of 9s. $1\frac{1}{2}d$. (Rs. $4\frac{9}{16}$). Of the four schools one was a Maráthi school, two were Kánarese schools, and one was a girls school. In Shalvadi in 1882-83 one Kánarese school had 153 names on the rolls, an average attendance of 101, and an average yearly cost for each pupil of 7s. $1\frac{1}{2}d$. (Rs. $3\frac{9}{16}$). In Annigeri in 1882-83 one second grade angio-vernacular school had 171 names on the rolls, an average attendance of 120, and an average yearly cost for each pupil of 8s. 6d. (Rs. $4\frac{1}{3}$). In Hebli in 1882-83 one Kánarese school had 150 names on the rolls, an average attendance of ninety-five, and an average yearly cost for each pupil of 6s. 9d. (Rs. $3\frac{3}{6}$). In Ron in 1882-83 one Kánarese school had 238 names on the rolls, an average attendance of 154, and an average yearly cost for each pupil of 8s. 8d. (Rs. $4\frac{1}{3}$). In Náregal in 1882-83 one second grade anglo-vernacular school

¹The details are: In 1872 three, in 1873 thirteen, in 1874 five, in 1875 fifteen, in 1876 eight, in 1877 five, in 1878 seven, in 1879 eight, in 1880 two, in 1881 ten, in 1882 fifteen, and in 1883 nineteen.

The cost for each pupil shown in these statements is what the pupil costs the State not what the pupil pays in fees. The rates of fees are given in the School Return page 616.

had 191 names on the rolls, an average attendance of 101, and an average yearly cost for each pupil of 5s. 1d. (Rs. 217). In Gadag in 1882-83 five schools had 511 names on the rolls, an average attendance of 354, and an average yearly cost for each pupil of 8s. 4d. (Rs. 4d). Of the five Gadag schools one was a second grade anglo-vernacular school, two were Kanarese schools, one was a Kanarese girls school, and one a night school. In Betgeri in 1882-63 two Government schools had 205 names on the rolls, an average attendance of 118, and an average yearly cost for each pupil of Ss. 7d. (Rs. 474). Of the Betgiri schools one was a Kanarczo boys school and the other a Kanarcse girls school. Besides these two vermeular schools, one for boys the other for girls were supported by the Basel Mission with 103 names on the rolls, an average attendance of 78, and an average yearly cost for each pupil of about £1 10s. (Rs. 15). In Mulgand in 1882-83 were two schools, one a second grade angle-vernacular school for boys the other a Kanarese school for girls with 345 names on the rolls, an average nttendance of 203, and an average yearly cost for each pupil of 7s. In Kustkot in 1882-83 was one Kanarese school 6d. (Rs. 33). with 123 names on the rolls, an average attendance of 97.5, and an average yearly cost for each pupil of 6%. 7d. (Ra. 374). In the town of Hubli in 1882-83, were fourteen schools with 2296 names on the rolls, an average attendance of 1347, and an average yearly cost for each pupil varying from £3 to 8s. (Rs. 30-4). Of the fourteen Hubli schools one was a first grade angle-vernacular school, one a Hindustáni school, one a Maráthi school, two Kánarese girls schools, one a night school, and eight Kanarese boys schools. Besides these rehools in 1882-83 three Kanarese schools, two for boys and one for girls, were supported by the Basel Mission with 182 names on the rolls, an average attendance of 151, and an average yearly cost for each pupil of about £2 10s. (Rs. 25). In Bankapur in 1882-83 were three schools with 442 names on the rolls, an average attendance of 310, and an average yearly cost for each pupil of 7s. 11d. (Rs. 327). Of these one was a second grade angle-vernacular school and of the other two schools one was a Hindustani school and the other a girls school. In Haveri in 1892-83 were three schools, one Kanareso branch school, one first grade anglo-vernacular school, and one girls school with 332 names on the rolls, an average attendance of 299, and an average yearly cost for each pupil of 9s. 8d. (Rs. 45). In Ranchennur in 1882-83 five schools had 440 names on the rolls, an average attendance of 310, and an average yearly cost for each pupil varying from 17s. 51d. to 8s. 5d. (Rs. 845 - 424). Of the five Ranebennur schools, one was a second grade anglo-vernacular school, one a Hindustáni school, one a Kánarese girls school, and two Kánareso primary schools.

In 1882-83, exclusive of the sixteen towns, Dharwar was provided with 288 schools, or an average of one school for every 4.5 villages. The following statement shows the distribution of these schools by sub-divisions:

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LE Instruction
THE B VILLAGE SCHOOLS.

Dhárwár Village Schools, 1882-83.

			Allages Popu-		ools.	Sub-Division.		Villages	Pepu- lation,	Schools.	
SOB-DIVIN	Sue-Division. Vill			Boys.	Girls.			Inages		Boya.	Giris
Dhárwir Navalgund Ron Gadag Hubh		133 91 59 100 81	95,420 7P,971 63,070 99,094 63,277	19 84 20 84 25	 1	Karajgi Hangal Ránchennur Kod	***	, 163 103	89,752 67,390 74,978 79,000	28 28 24 85	1 1 1
Kolghaigi Bankápur	***	1 100	51,720 70,907	14 94		Total		1309	841,667	285	6

Before the establishment of Government village schools, such children as got any schooling generally went to private schools kept by Bráhmans and Lingáyat priests. The pupils were Bráhmans or Lingáyats as other castes were not admitted into these schools.

NEWSPAPERS.

The town of Dhárwár has three local vernacular papers, the Dhárwár Vritta or Dhárwár News printed in Maráthi and published on Thursday; the Chandrodaya or Moon Rise printed in Kánareso and published on Saturday; and the Chháva or Elephant Calf published on Sunday. The Dhárwár News is said to be a fairly ably managed paper with about 450 subscribers; the Moon Rise has only lately appeared and has about 150 subscribers; the Elephant Calf, which is said not to be well conducted, seldom goes beyond the limits of Dhárwár town.

LIDRARY,

In the district are three libraries and four reading rooms. The three libraries are one each at Dhárwár, Hubli, and Ránebennur. The Native General Library at Dharwar is the largest and oldest. The Dharwar Native General Library was established in 1854 by Mr. Lakshman Shripád Nágpurkar a pandit or vernacular teacher. For some years after its establishment the library prospered, it then declined, but since 1872 through the efforts of some of the principal educational officers, the pleaders, and a few others it again is fairly successful. The library was once fairly stocked with books which during its time of depression were stolen. At present it has 451 books, 414 are English, thirty Maráthi, and seven Kánarese. The books are not classified and in spite of their experience are said not to be carefully kept. The books are kept in a small and inconvenient rented house. It is supported solely by subscriptions raised from about fifty-four subscribers at monthly rates varying from 6d. to 4s. (Rs. 1-2). The 1882-83 receipts amounted to nearly £30 (Rs. 300). Two English daily papers are taken by the library. Besides these the well-wishers of the library give for its use one English, three anglo-vernacular, and ten vernacular papers and one Marathi periodical. It also occasionally receives from the educational department copies of books free of charge. The Hubli library dates from 1865. It is partly supported from municipal funds and partly from subscriptions. It is prosperous. It contains 424 English, twentyeight Kanarese, twenty-four Sanskrit, eight Gujarati, five Hindustáni, and 343 Maráthi books. The library owns a fine building built from funds subscribed by the people of the town. The Hublimunicipality pays a yearly subscription of £14 18s. (Rs. 149), and there are sixteen subscribers at monthly rates varying from 6d. to 2s. (Rs. 1-1). The 1882-83 income was £15 15s. 6d. (Rs. 1574).

The library subscribes to two English papers one daily and one weekly, three Anglo-Marathi, four Marathi, and two Kanareso papers in addition to three Marathi monthly magazines. The library at Ranchennur was established in 1873. The books are kept in a rented and inconvenient building. It is supported from the interest of a sum of £150 (Rs. 1500) which was collected by public subscription. It takes in two anglo-vernacular, six vernacular, and one English paper, and occasionally receives presents of books from the educational department. Its 1882-83 income was £18 (Rs. 180). Besides these libraries there are reading rooms at Gadag, Reading Rooms. Haveri, Nargund, and Navalgund. The details are:

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Dhdrwdr Reading Rooms, 1882-83.

Name	Date.	Sub- scribers.	Papers taken.	Sub- scription.	
Gadaz	1970	20	8	3 to 3	
Hiveri	1550	45	4	4 to 3	
Nargund	1873	33	3	5 to 1	
Navalgund	1552		5	2 to 6	

Except Brahmans who read Marathi prints no class of the Kanarese population has shown any taste for newspaper reading. For the depressed classes Mhars or Holayas and others, whose touch other Hindus consider impure, a school of 105 boys has been opened in Dhárwar and another of fifty boys in Hubli. In village schools boys of these classes are allowed to attend if there is room to keep them by themselves. Besides those in Dharwar and Hubli about 150 low caste boys are being taught in village schools.

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CHAPTER XII.

HEALTH.

Chapter XII.

Health.

DISEASES.

Excert a fatal form of intermittent fever which came from Kanni about 1862 and for years wasted the western sub-divisions Dharwaf is a healthy district. The commonest and most fatal disease is intermittent fever. It is caught in forest and watered tracts and is often fatal. In the latter half (July - December) of 1818 cholars prevailed to a frightful degree causing immense mortality in the army and among the people generally.1 At Hubli in three days two officers and upwards of one hundred men were carried off by cholera.2 The next serious outbreak of cholera which has been traced was in 1865-66 when between November 1865 and October 1866, 10,024 fatal cases occurred. In 1869 between January and October, of 2712 cases reported 1459 proved fatal. During this outbreak in the town of Dharwar, 305 of 557 seizures were fatal. In 1876 and 1877 during the famine large numbers died of a cholera which was brought on by bad water and want of food. Small-pox visits the district periodically and usually during the hot months, causing many deaths. Guineaworm is more or less common during, the hot months. Probably from the scarcity and the badness of the water it took an epidemic form during the 1876-77 famine.

Hospitals, 1882. In 1882 besides the civil hospital at Dhárwár there were three grant-in-aid dispensaries one each at Hubli, Gadag, and Háveri. The number of patients treated was 44,307, of whom 43,692 were out-door and 615 in-door patients; the cost was £2565 (Rs. 25,650). The following details are taken from the 1882 reports:

Dhárnar.

The Dharwar civil hospital was removed to the new hospital building on the 1st of June 1882. The prevailing diseases are parasitic diseases, ague, skin diseases, chest eye and ear affections, rheumatism, and bowel-complaints. In 1882 cholera appeared in a sporadic form in some parts of the sub-division. 5276 ont-patients and 356 in-patients were treated at a cost of £1427 (Rs. 14,270).

¹ Bombay Courier, 19th December 1818.

The following story of the origin of the great plague of cholera in 1818 and 1819 is widely known and believed in Stâtar and in the Bombay Kanarese districts. Adil Shâh of Bijápur was a magician. He had power over spirits and diseases. At Bijápur he built a house with strong walls and a round stone roof. The house had no windows and no doors. He left a little hole and by his power over them he drove in all diseases cholera, small-pox, and fever, and shut the whole. After this the people were free from disease. When the English took Bijápur an officer saw this strong building without a window or a door. He thought it was to store money. He asked the people what was the use of this strong house with neither a window nor a door. The people said cholera and small-pox and fever were shut in the house and no one should open it. The English officer thought that this showed there was money in the house and that the king had told the people this story so that no man might touch his treasure. The officer broke down the wall and the house inside was (empty. Cholera and small-pox spread over the land and especially in Dhárwár many soldiers and many officers diod.

The Hubli dispensary was established in 1859. The commonest diseases are fevers, skin-diseases and ulcers, rheumatic and syphilitic affections, ophthalmia, and intestinal worms. In 1882 no epidemic occurred. 12,490 out-patients and 148 in-patients were treated at a cost of £442 (Rs. 4120).

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DISPENSARIES.

The Gagad dispensary was opened in 1864. The principal diseases are malarious fevers, rheumatic and syphilitic affections, ophthalmia and inflammation of the ear, chest affections, bowel-complaints, and skin-diseases. In 1882 13,052 out-patients and 52 in-patients were treated at a cost of £341 (Rs. 3410).

Gadag.

The Haveri dispensary was opened in 1878 in a hired house; but a new dispensary is being built. The commonest diseases are skin-diseases, malarious fevers, intestinal worms, and ulcers. In 1882 cholera prevailed in the neighbourhood during the month of May. During the year 12,874 out-patients and 59 in-patients were treated at a cost of £355 (Rs. 3550).

Ildveri.

In 1883 twenty-four persons seven of whom were new admissions, were confined in the Dhárwár Lunatic Asylum. Of these four improved and were made over to their relatives, and two died. The remaining eighteen, eleven men and seven women, were under care on the 31st of December. Of these seven suffered from acute mania, three from chronic mania, two from acute dementia, and twelve from chronic dementia. The general health of the inmates was fair. Of sixteen cases of illness admitted for treatment ten were discharged, two died, and four remained in the hospital.

LUNATIC ASYLUM.

According to the 1881 census 1686 persons (males 981, females 705) or 0·19 per cent of the population were infirm. Of the total number 1541 (males 894, females 647) were Hindus; 139 (males 83, females 56) Musalmáns; and 6 (males 4, females 2) Christians. Of 1686 the total number of infirm persons 130 (males 85, females 45) or 7·71 per cent were of unsound mind, 810 (males 474, females 336) or 48 04 per cent were blind, 584 (males 300, females 284) or 31·63 per cent were deaf and dumb, and 162 (males 122, females 40) or 9·60 per cent were lepors. The details are:

INFIRM PROPLE.

Districte Inform People, 1881.

		Hexpts.		Mitsalna'ns.		CHRISTIANS.		TOTAL	
		Malen.	Females	Males.	Females	Maion.	Females	Maley.	Females
Insine Illind Deaf-Mutes	•••	77 432 276 100	41 303 264 31	8 49 21 13	4 20 20 20	1 1 1	: : 19;	85 474 300 122	45 330 251 40
Total	.,.	894	617	63	100	4	2	991	705

VACCINATION.

In 1883-84 under the supervision of the Deputy Sanitary Commissioner Southern Deccan Registration District the work of vaccination was carried on by eighteen vaccinators with yearly salaries varying from £16 16s. (Rs. 16s) to £28 16s. (Rs. 28s). Of the operators fourteen were distributed over the rural parts of the district, and, of theremaining four, one was posted at each of the towns of Dhárwár, Gadag, Hubli, and Ránebennur. Besides the vaccinators

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Lis Vaccination.
The B

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the medical officer of the Haveri dispensary carried on vaccino operations. The total number of operations was 28,430 besides 783 re-vaccinations compared with 13,744 primary vaccinations in 1869-70.

The following statement shows the sex, religion, and age of the persons primarily vaccinated:

Dharedr Vaccination Details, 1869-70 and 1883-84.

]	Primary Vaccinations.											
YEAR	8	ox.	1		Ą							
	Males.	Females	IIIndus.	Musal- mans.	Pársis.	Chris- tlans.	Others.	Under One Year.	Over Ono Year.	Total.		
1809-70 1883-84	7390 14,024	0351 18,800	11,508 25,642	1901 3007	2	13 18	180 021		11,482 16,257	13,741 28,420		

In 1883-84 the total cost of these operations, exclusive of these performed in one dispensary was £381 14s. (Rs. 8317) or about 7½d. (4½ as.) for each successful case. The charges included supervision and inspection £279 12s. (Rs. 2796), establishment £506 18s. (Rs. 5069), and contingencies £45 8s. (Rs. 727). Of these the supervising and inspecting charges were met from Government provincial funds, while £500 8s. (Rs. 5004) were borne by the local funds of the different sub-divisions and £51 18s. (Rs. 517) were paid by the municipalities of Dhárwár, Gadag-Betgeri, and Hubli for the services of three vaccinators.

CATTLE DISEASE.

The most fatal and widespread form of cattle disease is that locally known as hirebeni. In this disease, which is prevalent at all seasons but is most fatal during the hot weather, the animal refuses food but drinks freely. A fluid discharges from the eyes and nostrils, the stools are frequent and bloody, and the urine scanty and highly coloured. The disease lasts three or four days and is generally fatal. The disease prevails in the black soil plain as well as in the hilly west; it seems to be worse where the soil is red and hard.

BIRTHS AND DEATHS.

The total number of deaths shown in the Sanitary Commissioner's yearly reports, for the eighteen years ending 1883, is 475,035 or an average mortality of 26,891, or, according to the 1881 census, of thirty in every thousand of the population. Of the average number of deaths 13,401 or 50'77 per cent were returned as due to fevers, 1891 or 7:16 per cent to cholera, 743 or 2:81 per cent to small-pox, 4259 or 16:13 per cent to bowel complaints, and 5747 or 21:77 per cent to miscellaneous diseases. Deaths from violence or injuries averaged 346 or 2.81 per cent of the average mortality. An examination of the returns shows that fever, which, during the eighteen years ending 1883 caused an average yearly mortality of 13,401 or 50.77 per cent, was below the average in twelve years and above the average in the six years ending 1680. Three years 1866 1867 and 1870 had less than 7000 deaths, the lowest total being 6183 in 1866; two years 1868 and 1869 had between 7000 and 8000; two years 1871. and 1873 between 9000 and 10,000; two years 1872 and 1883 between 10,000 and 11,000; and three years 1874 1881 and 1882 between

11,000 and 13,000. Of the six years above the average, 1876 had 13,515, 1880 had 13,917, 1879 had 17,802, 1875 had 17,818, 1878 had 29,082, and 1877 the famine year 39,915. Of the deaths from cholera, which amounted to 34,015 and averaged 1891, 11,192 or 32.87 per cent happened in 1866, 8779 or 25.78 per cent in 1877, and 7092 or 20.83 per cent in 1876. The only other years which were over the average were 1869 with 2691 deaths and 1875 with 2288. Except in 1878 when the number was 1790, and in 1882 when it was 130, in none of the other years were there more than thirty deaths, and four years, 1871 1874 1879 and 1880, were free from cholera. Of the deaths from small-pox, which amounted to 13,377 and averaged 7-13, 2653 or 19:83 per cent happened in 1872, 2642 or 19.75 per cent in 1877, 1645 or 12.29 per cent in 1868, and 1250 or 9.41 per cent in 1878. Besides these years three years had a more than average mortality from small-pox, 1869 with 894, 1871 with 815, and 1867 with 816. Four years 1870, 1874, 1876 and 1883 had between 500 and 400 deaths, 1866 had 393, 1875 had 238, 1878 had 169, 1882 had thirteen, 1880 had two, and the remaining two years 1879 and 1881 were free from small-pox. Of the deaths from bowelcomplaints which amounted to 76,666 or 4259 a year, cleven years were below the average, and seven, the seven years ending 1877. were above the average. The smallest number of deaths from bowel-complaints in any one of the eighteen years was 2084 in 1867 and the largest was 12,230 in 1877. Injuries, with a total of 6251 and an average of 346, varied from 257 in 1869 to 658 in 1877. Other causes with a total mortality of 103,453 and an average mortality of 5747 varied from 3394 in 1867 to 19,633 in 1877.

Birth returns are available only for the thirteen years ending 1893. During these thirteen years the number of births averaged 27,197. The yearly totals vary from a lowest of 9966 in 1878 to 38,927 in 1883. The details are:

Dhdrurar Births and Deaths, 1866-1883.

						 N				i —		
			DPATHS									
Yean.		Cholera.	Small- pox.	Fevers.	lion el Com- plaints	In- juries	Other Causes	Total.	Bintiis			
1967 1667 1669 1670 1670 1671 1572 1574 1676 1676 1677			11,192 6 201 1 201 17 2159 2159 7072 8779 1790	816 816 816 801 401 815 2033 1250 485 249 403 2012	0183 6710 7802 7803 6844 9210 10,775 9120 11,165 17,818 17,818 17,615 37,015	2709 2054 2701 2701 3517 5253 5559 4700 4621 4070 40718 12,200	2-7 296 278 257 301 310 297 362 350 279 654 677	4708 3374 417.2 47.17 49.20 55.92 67.83 67.83 67.85 57.94 57.94 10,633 67.35	21,025 13,306 16,770 19,195 16,267 25,841 21,304 21,545 30,533 31,726 83,547 42,365	26,431 25,666 25,477 27,701 27,701 29,569 21,403		
1879 1840 1841 1852			 5 130	g	17,802 13,617 12,556 11,443	2401 2018 3167 8511	445 325 703 253	2870 5192 4112 4151	21,5°8 21,261 20,4°2 19,039	15,927 29,450 33,315 30,257		
1833	***		23	493	10,310	3763	288	4253	10,195	39,927		
	Total		31,015	13,377	241,243	70,006	6251	103,453	475,035	83 1,658		
A	rerago	•••	1891	743	13,401	4259	340	6747	20,391	27,107		

1 The death returns are believed to be fairly correct and the birth returns to be incomplete

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Deaths.

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CHAPTER XIII.

SUB-DIVISIONS.1.

Chapter XIII.
Sub-Divisions.
BANKAPUR.

Banka'pur is in the west centre of the district. It is bounded on the north by Hubli and the Kundgol and Lakshmeshvar divisions of Jamkhandi and Miraj, on the east by the Lakshmeshvar division of Miraj and Karajgi, on the south by Hángal, and on the west by North Kánara and Kalghatgi. It contains 155 Government and sixteen alienated villages with an area of 343 square miles, a population of 76,554 or 223 to the square mile, and a yearly land revenue of £19,875 (Rs. 1,98,750).

Arca.

Of the 348 square miles, all of which have been surveyed in detail, twenty-four square miles are occupied by the lands of alienated rillages. The rest, according to the revenue survey returns, contains 167,338 acres or 83.57 per cent of arable land, 6159 acres or 3.07 per cent of unarable land, 1938 acres or 0.96 per cent of grass, 17,715 acres or 8.84 per cent of forests, and 7084 acres or 3.53 per cent of village sites, roads, rivers, and streams. From the 167,338 acres of arable land, 66,004 acres have to be taken on account of alienated lands in Government villages.

Aspect.

West Bankapur is broken by small hills and much of it is under forest, the centre is flat, and most of the east and north are full of bare low ridges. Some plots in the valleys are under tillage, but most of the ground is rugged, unfit for cultivation, and overgrown with grass. In the west small villages of poor husbandmen stand close together on shady knolls; in the east large settlements of rich husbandmen are scattered far apart in a bare open plain.

Soil,

In the west the soil is chiefly red, in the south and north chiefly black, and in the east a mixed black and red. Bankapur has many low ranges and detached hills. From the north of the sub-division the country falls sharply into Kalghatgi on the north-west and Kanara on the west. It is covered with low ranges and detached hills general richly wooded with many small villages and rice-fields. Deer and wild pig are found in different parts of the forest.

Climate.

Except Shiggson and at a few other places, which are surrounded by rice fields and where during the cold months, the climate is feverish, Bankapur is healthy. All over the sub-division the minfall is fairly constant and sufficient. At Shiggson the sub-division head-quarters, during the ten years ending 1881, the rainfall varied

¹ The sections on aspect, soil, climate, and water have been contributed by Messrs. J. F. Muir, C.S. and F. L. Charles, C.S. a The sub-division, population, and revenue figures are throughout for 1881-82.

from 15.23 inches in 1876 to 38.75 inches in 1877 and averaged 25.30 inches.

In the south-east corner the chief water supply is a stream which flows south-east into the Varda. The Varda, which, for about eight miles, forms the south boundary of Bankápur, passes over a stony sandy bed about 300 feet broad between steep earthy banks. The rest of the sub-division draws its water from reservoirs and ponds. The water of the largest ponds, as at Nagnur, Hire Bendigeri, and Yelvigi is good.

According to the 1882-83 returns farm stock included eleven riding and 4020 load carts, 8222 two-bullock and 712 four-bullock ploughs, 23,272 bullocks and 15,218 cows, 4747 he-buffaloes and 8597 she-buffaloes, 561 horses, 12,996 sheep and goats, and 351

usses. In 1881-82 of 95,799 acres the whole area held for tillage, 16,540 acres or 17.26 per cent were fallow or under grass. Of the 79,259 acres under tillage, grain crops occupied 46,190 acres or 58.27 per cent of which 24,300 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgaro, 8913 under rice bhatta (K.) or bhát (M.) Oryza sativa, 4057 under navant (K) or káng (M.) Panicum stalicum, 3193 under rági (K.) or náchni (M.) Eleusino corocana, 3273 under sáve (K.) or rari (M.) Panicum miliare, 1894 under wheat godhi (K.) or ghau (M.) Triticum cestivum, 127 under spiked millet scije (K.) or lujri (M.) Penicillaria spicata, and 133 under other grains of which details are not given. Pulses occupied 6558 acres or 8:27 per cent of which 2422 were under togari or tuvari (K.) or tur (M.) Cajanus indicus, 1727 under hurli (K.) or kulthi (M.) Dolichos bislorus, 1603 under hesaru (K.) or mug (M.) Phaseolus radiatus, 459 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 10 under uddu (K.) or udid (M.) Phascolus mungo, and 337 under other pulsos. Oilseeds occupied 2910 acres or 3.67 per cent of which 428 were under sesame yellu (K.) or til (M.) Sesamum indicum, 53 under linseed agashi (K.) or javas (M.) Linum usitatissimum, and 2129 under other oil seeds. Fibres occupied 22,481 acres or 28:36 per cont, of which 22,461 were under cotton, hatti or arale (K.) or kupus (M.) Gossypium herbaceum, and 20 under Bombay hemp sanbu (K.) or tág (M.) Crotalaria juncea. Miscellaneous crops occupied 1117 acros or 140 per cent of which 533 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 251 under sugarcano kabbu (K.) or us (M.) Saccharum officinarum, 4 under tobacco hagesoppu (K.) or tambáku (M.) Nicotiana tabacum, and the romaining 329 under various vegetables and fruits.

The 1881 population returns show that of 76,554 people 65,313 or 85:31 per cent were Hindus, 11,234 or 14:67 per cent Musalmans, and 7 Christians. The details of the Hindu castes are 1876 Brahmans; 27,692 Lingáyats; 1676 Jains, 757 Lavánás, 476 Telugu-Banjigárs, 163 Láds or South Gujarátis, 25 Komtis or Váishyás, and 25 Nárvekars and Bándekars, traders; 5374 Maráthás, 560 Radders, 330 Rajputs, and 31 Dásárs, husbandmen; 1642 Páncháls, metal-workers; 803 Gavandis, masons; 371 Kumbhárs, potters; 350 Shimpis, tailors; 193 Medars, bamboo-workers; 159 Sonárs, goldsmiths; 126 Kammárs, blacksmiths; 111 Badiges, carpenters;

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Chapter XIII-Sub-Divisions. Benkleur. People, 1881. 111 Ilgerus, palm-tappers; 141 Iad-Suryavanshis, butchers; 24 Killikiatars or Chhatris, labourers; 2655 Gánigárs, oilmen; 772 Kostis, weavers; 6098 Kurubars, shepherds; 33 Gaulis, cowherds; 4210 Bedars, hunters; 1124 Ambigs, fishermen; 848 Nádigárs, barbers; 521 Parits, washermen; and 278 Chelvádis, Lingáyat bradles; 1118 Vaddars, diggers; 470 Koravars, basket-makers; 16 Dombars, rope-dancers; 107 Gollars, 26 Jogis, 25 Helávars, 23 Gondhalgárs, 19 Bairágis, 20 Kshetridásás, and 4 Bháts, beggars; 2429 Mádigárs, leather-workers; 798 Holayás or Mhárs, labourers; 458 Kotegárs, beggars; 199 Samagárs or Chámbhúrs, shoemakers; 36 Dhors, tanners; and 10 Bhangis, scavengers.

Duánwán.

Dha'rwa'r, in the north-west corner of the district is bounded on the north by Belgaum, on the east by Navalgand, on the south-east by Ilubli, on the south by Kalghatgi, on the south-west by Haliyal in North Kánara, and on the north-west by Belgaum. It contains 179 Government and thirty-four alieuated villages, with an area of 425 square miles, a population of 111,137 or 261 to the square mile, and a yearly land rovenue of £27,705 (Rs. 2,77,050).

Area.

Of the 425 square miles, 398 have been surveyed in detail: According to the revenue survey returns, seventy-eight square miles are occupied by the lands of alienated villages. The rest contains 179,078 acres or 80'70 per cent of arable land, 6097 acres or 3'00 per cent of unarable land, 839 acres or 0'37 per cent of grass, 28,065 acres or 13'00 per cent of forests, and 6177 acres or 2'90 per cent of village sites, roads, rivers, and streams. From the 179,708 acres of the arable land 97,995 acres have to be taken on account of alienated lands in Government villages.

Aspect.

From rugged and hilly land in the west and south the country gradually passes north and east into a black soil plain broken by an occasional peak or group of bare hillocks. In the east and north, except a few búbhul and mango trees along the borders of fields the plain is bare. In the south and west the waste is covered with forest and the hills with brushwood and grass.

Hills.

In Dhárwár sub-division are seven hills, Dargadgudda, Hulli-mardi, Peddakanvi, Sidráyanmardi, Tákarinpur, Tolanmardi also called Vankimardi, and Topinhatti. Of these Durgadgudda is in Durgatkeri about eighteen miles west of Dhárwár, Hullimardi in Holikot about thirteen miles south-west of Dhárwár, Peddakanvi in Kalkeri about twelve miles south-west of Dhárwár, Sidráyanmardi in Nirligi about thirteen miles west of Dhárwár, Tolanmardi or Vankimardi in Vudvánagalvi about sixteen miles south-west of Dhárwár, and Topinhatti in Kivdibail sixteen miles south-west of Dhárwár. Tolanmardi the highest of these hills rises nearly 300 feet above the plain and the rest from 150 to 200 feet.

Soil.

Except some black soil valleys almost the whole west of the sub-division is red, while the whole cast is black except occasional red ridges. The black eastern soil is best suited to late crops, and the red western soil to rice.

Climate.

On the whole the climate is good. The cold months from a November to February and the early rains are cool even chilly, Showers often fall in April and usually by the middle of May the

hot weather is over. In the west the rainfall is heavier than in the east. Except that in the cold months the west is rather feverish, the sub-division is healthy. At Dhárwár, during the ten years ending 1881 the rainfall varied from 22.05 inches in 1876 to 52.19 inches in 1874 and averaged 32.38 inches.

Water is scanty. The only stream that holds water throughout the year is the Tuprihalla. Most villages have ponds, which fill twice in the year, during the April thunderstorms and during the north-east rains in October. Only a few have sweet wholesome water; the water of the rest is brackish and unwholesome. Besides ponds some of the larger villages have draw wells, but in most wells as in the ponds the water is brackish. In seventeen large villages the eighteen reservoirs water about 3902 acres.

According to the 1882-83 returns the farm stock include 177 riding and 4614 load carts, 8547 two-bullock and 1126 four-bullock ploughs, 23,982 bullocks, 15,482 cows, 5526 he-buffaloes, 11,126 shebuffaloes, 904 horses, 16,237 sheep and goats, and 509 asses.

In 1881-82 of 124.045 acres the whole area held for tillage, 22.040acres or 17.76 per cent were fallow or under grass. Of the 102,005 acres under tillage, grain crops occupied 72,597 acres or 71:17 per cent of which 31,189 were under Indian millet jola (K.) or jvari (M.) Sorghum vulgare, 16,527 under wheat godhi (K.) or ghau (M.) Triticum estivum, 12,472 under rice bhatta (K.) or bhát (M.) Oryza sativa, 6562 under navani (K.) or káng (M.) Panicum italicum, 3542 under rági (K.) or náchni (M.) Eleusine corocana, 1196 under sáve (K.) or vari (M.) Panicum miliare, 397 under spiked millet sejje (K.) or bájri (M.) Penicillaria spicata, and 712 under other grains of which details are not given. Pulses occupied 10,079 acres or 9.88 per cent of which 3982 were under togari or tuvari (K.) or tur (M.) Cajanus indicus, 2953 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 2172 under hurli (K.) or kulthi (M.) Dolichos biflorus, 673 under *liesaru* (K.) or mug (M.) Phaseolus radiatus, 37 🛦 under uddu (K.) or udid (M.) Phaseolus mungo, and 262 under other pulses. Oilseeds occupied 4266 acres or 4.18 per cent, of which 88 were under sesame yellu (K.) or til (M.) Sesamum indicum, and 4178 under other oilseeds. Fibres occupied 13,326 acres or 1306 per cent of which 13,069 were under cotton hatti or arale (K.) or kápus (M.) Gossypium herbaceum, and 257 under Bombay hemp sanbu (K.) or tág (M.) Crotalaria juncea. Miscellaneous crops occupied 1737 acres or 1.70 per cent of which 841 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 360 under tobacco hágesoppu (K.) or tambáku (M.) Nicotiana tabacum, 130 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, and the remaining 406 under various vegetables and fruits.

The 1881 population returns show that of 111,137 people 95,155 or 85.61 per cent were Hindus, 15,011 or 13.50 per cent Musalmáns, 924 or 0.83 per cent Christians, 24 Pársis, 18 Jews, and 5 Buddhists. The details of the Hindu castes are: 4525 Bráhmans; 37,624 Lingáyats; 2608 Jains, 363 Liáds or South Gujarátis, 95 Nárvekars and Bándekars, 34 Chunáris, 21 Lavánás, 17 Telugu-Oshnámarus,

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and G Márwáris, tradors ; 12,668 Maráthás, 753 Rajputs, 71 Radden 44 Dásárs, and 10 Kámátis, husbandmen; 2062 Páncháls, meial workers; 850 Gavandis, masons; 702 Shimpis, tailors; 478 Medan, bamboo-workers; 447 Lad Suryavanshis, butchers; 432 Kumbhax potters; 391 Badiges, carpenters; 415 Sonárs, goldsmiths; 361 Kammars, blacksmiths; 136 Ilgerus, palm-tappers; 46 Nilári, indigo-dyors; 41 Killikiatars, labourers; 27 Jingars, saddle-maken; 2922 Kostis, wenvers; 1600 Klintris, silk dyers; 1285 Gánigár, oilmen; 493 Dovángs or Hatgárs, weavers; 7645 Kurnbars, shepherds; 144 Gavlis cowherds; 5714 Bedars, hunters; 966 Nadigars, barbers; 681 Parits, washermen; 381 Bhois, litter-bearers, 274 Chelvádis, Lingáyat beadles; 269 Ambigs, fishermen; 41 Kalivants, dancing-girls; 939 Vaddars, diggers; 565 Koravars, basketmakers; 50 Shikalgars, armourers; 29 Dombars, rope-dancers; 1000 Kábáligárs, 102 Gollárs, 77 Gondhalgárs, 63 Jogis, 35 Bairágs, 19 Gosávis, 6 Helávars, 5 Kshetridásás, and 4 Dovdásás, beggars; 2360 Mádigárs, leather-workers; 1358 Holayás or Mhárs, labourers; 572 Samagárs or Chámbhárs and 115 Mochigárs, shoe-makers; 81

GADAG.

Dhors, tanners; 37 Kotegárs, boggars; and 33 Bhangis, scavengers.

Gadag, in the cast of the district, is bounded on the north by Ron, on the east by the Nizam's territory, on the south by the Shirhatti division of Sángli and the Kundgul division of Jamkhandi, and on the west by Navalgund. It contains 114 Government and fourteen alienated villages, with an area of 609 square miles, a population of 100,333 or 148 to the square mile, and a yearly land revenue of £25,740 (Rs. 2.57.400).

Arca.

Of the 699 square miles, 697 have been surveyed in detail. According to the revenue survey returns; fifty-three square miles are occupied by the lands of alienated villages. The rest contains 353,166 acres or 8538 per cent of arable land, 6648 acres or 0·16 per cent of unarable land 552 acres or 0·13 per cent of grass, 40,723 acres or 9·84 per cent of forests, and 12,529 acres or 3·02 per cent of village sites, roads, rivers, and streams. From the 353,166 acres of arable land 88,221 acres have to be taken on account of alienated lands in Government villages.

Aspect.

Compared with Navalgund to the north-west and Ron to the north Gadag is hilly and fairly wooded. The north and east are level. But the Kappatgudd hills roughen about thirty-three miles of the south-west. In the west at Mulgand are some low curiously shaped hills with a confusion of large granite boulders, and in the south close to Mundargi is a bare mass of grayish stone partly granite. In the south the villages are small and close together; in other parts they are three to four miles from each other. Most of the village sites are bare and the people are poor.

Soil.

In the south and on both sides of the Kappatgudd hills the soil is red, further from the hills black soil appears often mixed with red and whitish grey. In the west north and east the soil is rich lokk.

Hills,

The chief hills are the Kappatgudd range on the south west. They are of strongly iron charged clay slate, which in the west shows traces of gold. They rise a little to the south-west of Galdag, and covering a tract four to five miles broad, stretch about this ty-

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8 under uddu (K.) or udid (M.) Phaseolus mungo, and 15 under other pulses. Oilseeds occupied 13,923 acres or 6:20 per cent, of which 4294 were under linseed agashi (K.) or javas (M.) Linum usitatissimum, 875 under sesame yellu (K.) or til (M.) Sesamen indicum, and 8754 under other oilseeds. Fibres occupied 79,531 acres or 35:47 per cent, of which 79,537 were under oction hatti or arale (K.) or tapus (M.) Gossypium herbaceum, 45 under Bombay hemp sanbu (K.) or tag (M.) Crotalaria juncea, and 9 under Indian hemp pundi (K.) or ambidi (M.) Hibiscus cannabinus. Miscellaneous crops occupied 861 acres or 0:38 per cent of which 170 were under sugarcane kabbu (K) or us (M) Saccharum officinarum, 99 under tobacco hagesoppu (K.) or tambaku (M.) Nicotiana tabacum, 661 under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, and the remaining 531 under various vegetables and fruits.

People, 1881.

The 1881 population returns show that of 100,333 people 89,551 or 89.25 per cent were Hindus, 10,314 or 10.28 per cent Musalmans, and 468 or 0.46 per cent Christians. The details of the Hinda castes are: 3432 Bráhmans; 29,305 Lingáyats, 698 Jains, 497 Lavánás, 492 Telugu-Banjigárs, 345 Komtis, 125 Gurjars, 110 Láds, 29 Telugu-Oshnámarus, and 5 Márwáris, traders; 5028 Radders, 2481 Maráthás, 494 Rajputs, 75 Malavars, husbandmen; 2183 Panchals, metal-workers; 701 Shimpis, tailors; 687 Gavandis, masons; 407 Kumbhárs, potters; 228 Ilgerus, palm-tappers; 172 Sonárs, goldsmiths; 101 Badiges, carpenters; 97 Kammárs, blacksmiths; 81 Killikiatars, labourers; 72 Lad-Suryavanshis, butchers; 52 Jingars, saddle-makers; 17 Medars, bamboo-workers; 4018 Gánigárs, oilmen; 2346 Hatgárs, weavers; 1850 Kostis, weavers; 1568 Khatris, silk-dyers; 14,507 Kurubars, shepherds; 45 Gavlis, cowherds; 6274 Bedars, hunters; 1082 Nádigárs, barbers; 918 Parits, washermen; 206 Bhois, litter-bearers; 156 Chelvadis, Lingayat beadles; 1680 Vaddars, diggers; 687 Koravars, mat and basket makers; 27 Dombars, rope-dancers; 572 Gollárs, 24 Jogis, 10 Gosávis, 7 Budbudkis, beggars; 3680 Mádigárs, leather-workers; 1409 Holayás, labourers; 383 Samagárs and 105 Mochigárs, shoemakers; 64 Dhors, tanners; and 16 Bhangis, scavengers.

HANGAL,

Ha'ngal is in the south-west centre of the district, it is bounded on the north by Bankapur, on the east by Karajgi and Kod on the south by Maisur, and on the west by North Kanara. It contains 175 Government and thirty-six alienated villages with an area of 298 square miles, a population of 65,787 or 220 to the square mile, and a yearly land revenue of £18,449 (Rs. 1,84,490).

Area.

Of the 298 square miles, 293 have been surveyed in detail. According to the revenue survey returns, forty-three square miles are occupied by the lands of alienated villages. The rest contains 126,994 acres or 77.76 per cent of arable land, 944 acres or 0.57 per cent of unarable land, 159 acres or 0.09 per cent of grass, 15,368 acres or 941 per cent of forests, and 19,831 acres or 12.14 per cent of village sites, roads, rivers, and streams. From the 126,994 acres of arable land, 35,226 acres have to be taken on account of alienated land in Government villages.

Aspect.

The east is bare, but much of the south and west is covered with forest leaving openings round the villages for tillage. The surface is

uneven and much of it is watered by ponds. The villages are small and close together generally at some distance from the banks of streams. Some of the villages are walled, and others are open. In the east the soil is black, in the west and south it is red, and in the north it is a mixture of black and red. The country is covered with thickly wooded knolls and risings giving cover to pig and spotted deer, and to a few panthers. Sixty years ago wild elephants used to come north from the Maisur and Kanara forests.

Though, on account of the large area of watered land, it is rather feverish during the cold months, the climate of Hángal is temperate and healthy. The thermometer seldom rises above 100°, and after April falls rapidly to 85° in the middle of May and to 70° in June. At Hángal during ten years ending 1881 the rainfall varied from 22.68 inches in 1876 to 54.64 inches in 1871 and averaged 35.17 inches.

The Varda flows for about twelve miles through the south-east of the sub-division. It is fordable during the dry months. Of local streams the Dharma is the largest rising in the west and flowing north-east for about twenty miles. It runs all the year round in a small stream, and has a dam at its source from which twelve square miles of sugarcane and rice fields are watered. Besides the river and streams many ponds and some miles of ancient channels bring water to villages at a distance from the head pend.

According to the 1882-83 returns farm stock included eight riding and 3075 load carts, 8791 two-bullock and 158 four-bullock ploughs, 23,152 bullocks and 18,954 cows, 5840 he-buffaloes and 6819 she-buffaloes, 403 horses, 9936 sheep and goats, and 150 asses.

In 1881-82 of 80,259 acres the whole area held for tillage, 23,493 acres or 29:27 per cent were fallow or under grass. Of the 56,766 acres under tillage, grain crops occupied 41,449 acres or 73:01 per cent of which 20,813 were under rice bhatta (K) or bhat (M.) Oryza sativa, 12,846 under Indian millet jola (K.) or jrári (M.) Sorgham vulgaro, 3833 under rági (K.) or náchni (M.) Eleusino corocana, 1987 under navani (K.) or káng (M.) Panicum italieum, 1880 under rare (K.) or vari (M.) Panicum miliare, 40 under spiked millet sejje (K.) or bájri (M.) Penicillaria spicata, and 10 under wheat godhi (K.) or ghan (M.) Triticum astivum. Pulses occupied 3978 acres or 7 per cent of which 1715 were under hurli (K.) or kulthi (M.) Dolichos biflorus, 1256 under togari or turari (K.) or tur (M.) Cajanus indicus. 412 under hesaru (K.) or mug (M.) Phaseolus radiatus, 356 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 99 under uddu (K.) or udid (M.) Phascolus mungo, and 110 under other pulses. Oilseeds occupied 2741 acres or 482 per cent of which 205 were under sesamo yellu (K.) or til (M.) Sesamum indicum, 121 under Imseed agashi (K.) or javas (M.) Linum usitatissimum, and 2415 under other Fibres occupied 5752 acres or 10:13 per cent of which 5668 were under cotton halli or arale (K.) or kapus (M.) Gossypium herbaceum, and 81 under Bombay hemp sanbu (K.) or tag (M.) Crotalaria juncea; Miscellaneous crops occupied 2816 acres or 5-01 per cont of which 1250 were under sugarcane kabba (K.) or us (M.) Snecharum officinarum, 818 under chillies menasinakai (K.)

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Ilángal, People, 1881, or mirchi (M.) Capsicum frutescens, 3 under ginger shunti (K.) alla (M.) Zinziber officinale, and the remaining 766 under various vegetables and fruits.

The 1881 population returns show that of 65,787 people 56,433 or 85.78 per cent were Hindus, 9311 or 14.19 per cent Musalmáns, 12 Christians, and one a Parsi. The details of the Hindu castes are: 1948 Bráhmans; 27,397 Lingáyats; 971 Jains, 440 Lavánás, 163 Láds, 59 Telugu-Oshnámarus, 10 Chunáris, and 2 Márwáris. traders; 3280 Maráthás, 992 Kámátis, 126 Malopáiks, 124 Rajputs, 120 Radders, 100 Malayars, 37 Haslárs, and 35 Dásárs, husbandmen: 1237 Panchals, metal-workers; 634 Shimpis, tailors; 246 Ilgerus. palm-tappers; 221 Sonárs, goldsmiths; 122 Lád Suryavanshis, butchers; 177 Gavandis, masons; 117 Badiges, carpenters; 84 Kumbhars, potters; 56 Nagliks, dyers; 32 Kammars, blacksmiths; 28 Killikiátars, labourers; 26 Medars, bamboo-workers; 549 Gánigárs, oilmen; 292 Kostis and 181 Hatgárs, weavers; 2778 Kurubars, shepherds; 9 Gavlis, cowherds; 4183 Bedars, hunters; 577 Parits, washermen; 553 Chelvádis, Lingáyat beadles; 151 Nádigárs, harbers; 123 Ambigs, fishermen; 42 Bhois, litter-hearers; 2831 Vaddars, diggers; 518 Koravars, mat and basket-makers; 3 Dombars, rope-daucers; 621 Gollárs, 253 Jogis, 122 Helávars, 10 Gondhalgárs, and 8 Kshotridásás, boggars; 2012 Holayás, labourers; 1231 Mádigárs, leather-workers; 519 Kotegárs, beggars; 43 Samagárs, shoomakers ; and 40 Dhors, tanners.

HUBLI.

Hubli lies a little to the north-west of the centre of the district. It is bounded on the north by Dhárwár and Navalgand, on the east by Navalgand and Gadag, on the south by the Kundgal division of the Jamkhandi State and Bankápur, on the south-west by Kalghatgi, and on the west and north-west by Dhárwár. It contains eighty-six Government and eight alienated villages with an area of 311 square miles, a population 91,997 or 295 to the square mile, and a yearly land revenue of £26,056 (Rs. 2,60,560).

Area.

Of the 311 square miles, 308 have been surveyed in detail. According to the revenue survey returns, fifteen square miles are occupied by the lands of alienated villages. The rest contains 174,697 acres or 92·12 per cent of arable land, 768 acres 0·40 per cent of unarable land, 3006 acres or 1·58 per cent of grass, 1278 acres or 0·67 per cent of forests, and 9873 acres or 5·20 per cent of village sites, reads, rivers, and streams. From the 174,697 acres of arable land 48,549 acres have to be taken on account of alienated lands in Government villages.

Aspect.

The water-shed of South India runs through the sub-division from north to south dividing it into two enequal parts. To the west of the water-shed the country is broken by a few low hills with many small villages of poor hardworking people on rising ground. To the east of the watershed is a bare black level broken by a few straggling bábhul trees, and, far apart on the banks of streams, are large settlements of rich skilful husbandmen.

Soil

In the north and east the soil is black and rich well suited for cotton. Most of the western black soil fields have bands of red mixed with the black and the soil of the rolling uplands is red.

Of two hills Doddagudd and Burdsinghi, Doddagudd in Unakall two miles north-east of Hubli, rises steep and bare about 300 feet above the plain. Burdsinghi is four miles south of Hubli where the general level is about forty feet lower than to the north of Hubli.

The climate of Hubli is temperate, neither very hot nor very cold, the west being wetter and cooler than the east. In a year of excessive rainfall the eastern black soil remains damp long after the rains are over and during the cold months the climate becomes feverish. A small tract between Behatti and Hebsur to the north, though it does not get a good rainfall oftener than once in four years, is so rich that it repays the husbandman. At Hubli, during the ten years ending 1881, the rainfall varied from 14:58 inches in 1876 to 43:55 inches in 1871 and averaged 28:25 inches.

In the west the chief source of water are west-flowing streams. Of these the Shahmalla, which lower down is called the Kallhalla is the largest, flowing over sand and gravel forty to fifty feet broad between sloping earthy banks. In the east the north-flowing Bennihalla passes along a muddy bed 150 to 200 feet broad between steep and earthy banks. During the hot season both of these streams cease to flow but the water stands in pools. Almost every village has a pond. The western ponds are small, but the water, which is good and plentiful, is used for drinking and for watering rice fields. In the east the water of the ponds and smaller streams is often brackish and unfit for drinking; and in dry years the supply fails.

According to the 1882-83 returns the farm stock included 162 riding and 4396 lead earts, 5111 two-bullock and 336 four-bullock ploughs, 17,562 bullocks, 8066 cows, 2268 he-buffaloes and 7424 she-buffaloes, 481 horses, 18,988 sheep and goats, and 1313 asses.

In 1881-82 of 125,024 acres the whole area held for tillage, 7331 acres or 5.86 per cent were fallow or under grass. Of the 117,693 acres under tillage, grain crops occupied 59,579 acres or 50.61 per cent of which 28,338 were under Indian millet jola (K.) or jvari (M.) Sorghum vulgare, 24,042 under wheat godhi (K.) or ghau (M.) Triticum astivum, 2635 under navani (K.) or Láng (M.) Panicum italicum, 2071 under rice batta (K.) or bhát (M.) Oryza sativa, 1163 under rági (K.) or náchni (M.) Eleusino corocana, 1028 under sávo (K.) or vari (M.) Panicum miliare, 57 under spiked millet sejje (K.) or bijri (M.) Penicillaria spicata, and 215 under other grains of which details are not given. Pulses occupied 7113 acres or 6-32 per cent of which 3280 were under gram kadli (K.) or harbhara (M.) Cicer arietinum, 1906 under togari or turari (K.) or tur (M.) Cajanus indicus, 1516 under hesuru (K.) or mug (M.) Plinscolus radiatus, 570 under hurli (K.) or kulthi (M.) Dolichos biflorus, and 171 under other pulses. Oilseeds occupied 5015 neres or 4.28 per cent of which 1207 were under linseed agashi (K.) or javas (M.) Linum usitutissimum, 131 under sesame yellu (K.) or til (M.) Sesamum indicum, and 3707 under other oilseeds. Fibres occupied 44,910 neres or 38:15 per cent of which 41,865 were under cotion hatti or arale (K.) or kapus (M.) Gossypium herbaceum, and 15 under Bombay homp sanba (K.) or tag (M.) Crotalaria juncea. Miscellaneous Chapter XIII.
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Hunui, Clonate.

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La Hunn.,

Sk 18 crops occupied 716 acres or 0.60 per cent of which 275 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 101 under tobacco hágesoppu (K.) or tambiku (M.) Nicotiana tabacum, 54 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, and the remaining 283 under various vegetables and fruits.

People, 1881.

The 1881 population returns show that of 91,997 people 75,739 or 82:32 per cent were Hindus, 15,884 or 17:26 per cent Masalmáns, 368 or 0.40 per cent Christians, and 6 Parsis. The details of the Hindu castes are: 2554 Bráhmans; 31,438 Lingávats; 1540 Jains, 163 Láds, 68 Komtis, 11 Gurjars, 9 Támbolis, and 8 Lavánás, traders: 3482 Maráthás, 1947 Radders, 309 Rajputs, and 17 Dásárs, husbandmen: 1860 Panchals, metal-workers; 1662 Shimpis, tailors: 310 Gavandis, masons ; 300 Kumbhárs, potters ; 245 Sonárs, goldsmiths ; 238 Badiges, carpenters; 181 Lád-Suryavanshis, butchers; 170 Medars, bamboo-workers ; 158 Jingars, saddle-makers ; 91 Kammárs, blacksmiths; 65 Niláris, indigo-dyers; 4749 Kostis, weavers; 2127 Gánigárs, oilmen; 9215 Kurubars, shopherds; 119 Gavlis, cowherds; 3332 Bedars, hunters; 652 Nadigars, barbers; 432 Parits, washermon; 315 Chelvadis, Lingayat bendles; 52 Bhois, litter-bearers; 1025 Vaddars, diggers; 277 Koravars, mat and basket makers; 68 Shikalgars, armourers; 67 Dombars, rope-dancers; 333 Gollars, 78 Jogis, 9 Gosávis, 6 Holávars, 6 Bháts, and 5 Joshis, boggars; 3942 Mádigárs, leather-workers; 1506 Holayás, labourers; 484 Samagárs, shoemakers; 89 Dhors, tanners; 25 Bhangis, scavengers.

KALOHATOL.

Kalghatgi is in the west of the district. It is bounded on the north by Dhárwár, on the east by Hubli and Bankápur, on the south by Yellápur in North Kánara, and on the west by Yellápur and Haliyál in North Kánara. It contains 121 Government and twenty alienated villages with an area of 279 square miles, a population of 50,769 or 181 to the square mile, and a yearly land revenue of £12,985 (Rs. 1,29,850).

Arca.

Of the 279 square miles, 269 have been surveyed in detail. According to the revenue survey returns, thirty-six square miles are occupied by the lands of alienated villages. The rest contains 97,868 acres or 62.85 per cent of arable land, 499 acres or 0.32 per cent of marable land, 1618 acres or 1.03 per cent of grass, 46,434 acres or 29.82 per cent of forests, and 9282 acres or 5.96 per cent of village sites, reads, rivers, and streams. From the 97,808 acres of arable land 20,926 acres have to be taken on account of alienated lands in Government villages.

Aspect.

Most of Kalghatgi is broken by woody hills. The east and south are open and rolling with bushy uplands. The north and west are wilder with one long ridge about 700 feet above the plain and several lower ranges, which, especially in the west, are thick covered with trees to the tops. The villages are unwalled, and are close together, generally on rising ground shaded by tamarind trees.

Soil.

Except a small tract in the cast, the soil is red, with in parts a mixture of crambly trap or murum and gravel.

Hills.

The only two large hills are Budangadd and Ganigadd with ridged tops and bush-covered sides. Budangadd, about twolve miles north-east of Kalghaigi, is eight miles from north to south and has an average breadth of one mile. Ganigudd about four miles west of Kalghatgi, is half a mile long and a quarter of a mile broad.

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KALGHATGI.
Climate.

The rains are damp and the cold weather which lasts till the end of February is cool and pleasant. After February the climate grows dry and hot, and disagreeable east winds set in. The dryness and heat last till May when thunderstorms with hail and heavy rain cool and soften the air. The rainfall in the woody west is heavier than in the rest of the sub-division. At Kalghatgi during the ten years ending 1881 the rainfall varied from 20.43 inches in 1876 to 42.95 inches in 1874 and averaged 29.25 inches.

Water.

The supply of water is on the whole plentiful. The Bidtihalla from the north and the Kalhalla from the north-east meet in the middle of the sub-division, and, over a rocky and sandy bed about a hundred feet broad, between steep earthy banks, flow south in a single stream at first under the name of the Bedti, and near the coast of the Gangávali. During the hot season the stream ceases but pools of water remain in the bed. Besides the streams each village has its pond most of which hold water through the year.

Stock.

According to the 1882-83 returns farm stock included fifty-nine riding and 2444 lead carts, 7822 two-bullock and two four-bullock ploughs, 22,781 bullocks and 17,747 cows, 6230 he-buffaloes and 5514 she-buffaloes, 463 horses, 4725 sheep and goats, and 281 asses.

Crops, 1881 82.

In 1881-82 of 70,616 acres the whole area held for tillage, 20,913 acres or 29.61 per cent were fallow or under grass. Of the 49,703 acres under tillage, grain crops occupied 45,860 acres or 22:26 per cent of which 23,990 were under rice bhatta (K.) or bhát (M.) Oryza sativa, 12,897 under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, 5429 under rági (K.) or náchni (M.) Elcusine corocana, 2364 under sáve (K.) or vari (M.) Panicum miliare, 1165 under navani (K.) or káng (M.) Panicum italicum, 11 under wheat godki (K.) or ghau (M.) Triticum estivum, 3 under spiked millet sejje (K.) or bújri (M.) Ponicillaria spicata, and one under maiže mekke jola (K.) or makai (M.) Zen mays. Pulses occupied 1093 acres or 2.19 per cent of which 681 were under togari or tuvari (K.) or tur (M.) Cajanus indicus, 232 under hurli (K.) or kulthi (M.) Dolichos biflorus, 87 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 56 under hesaru (K.) or mug (M.) Phaseolus radiatus, 35 under uddu (K.) or udid (M.) Phaseolus mungo, and two under other pulses. Oilseeds occupied 1066 acres or 2.14 per cent of which 213 were under sesame yellu (K.) til (M.) Sesamum indicum, and 853 under other oilseeds. Fibres occupied 871 acres or 1.75 per cent of which 753 were under cotton hatti or arale (K.) or kapus (M.) Gossypium herbaceum, 112 under Bombay hemp sanbu (K.) or tag (M.) Crotalaria juncea, and 6 under Indian hemp pundi (K.) or ambadi (M.) Hibiscus cannabinus. Miscellaneous crops occupied 813 acres or 1 63 per cent of which 500 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 187 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, 6 under tobacco hágesoppu (K.) or tambáku (M.) Nicotiana tabacum, and the remaining 120 under various vegetables and fruits.

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Sub-Divisions.

Kalgnatgi, Prople, 1851.

The 1881 population returns show that of 50,769 people 45,491 or 89-60 per cent were Hindus, 4725 or 9-30 per cent Musalmans, and 553 or 1 08 per cout Christians. The details of the Hindu castes are: 946 Bráhmans; 20,493 Lingáyats; 1272 Jains, 843 Lavánás, 143 Láds or South Gujarátis, 132 Nárvekars and Bándekars, and 16 Gurjars or Gujarát Vánis, traders; 6516 Maráthás, 623 Radders, and 481 Rajputs, husbandmen; 743 Páncháls, metal-workers; 342 Gavandis masons; 264 Sonárs, goldsmiths; 205 Shimpis, tailors; 191 Badiges, carpenters; 155 Kumbhars, potters; 139 Lad Suryavanshis, butchers; 105 Ilgerus, palm-tappers; 102 Mcdars, basket-makers; and 55 Kammars, blacksmiths; 375 Ganigars, oilmen; 258 Kostis and 189 Hatgárs, weavers; 2160 Kurubars, shepherds; 121 Gavlis, cowherds; 2002 Bedars, hunters; 500 Ambigs, fishermen; 431 Parits, washermon; 259 Nádigárs, barbers; and 165 Chelvádis, Lingayat beadles; 1101 Vaddars, diggers; 445 Koravars, basketmakors; 8 Dombars, rope-dancers; 36 Gollárs, 30 Jogis, 19 Gondbalgárs, and 9 Gosávis, beggars; 1250 Mádigárs, leatherworkers; 1246 Holayas or Mhars, labourers; 225 Samagars or Chambhars, shoemakers; and 37 Dhors, tanners.

Karajol.

Karajgi, in the south-cast of the centre of the distret, is bounded on the north by the Lakshmeshvar division of Miraj and the Shirhatti division of Sángli, on the cast by the Tangbhadra which separates it from Belári in Madras, on the south by Kod and Ránchennur, and on the west by Hángal and Bankápur. It contains 141 Government and six alienated villages with an area of 442 square miles, a population of \$3,216 or 188 to the square mile, and a yearly land revenue of £19,232 (Rs. 1,92,320).

Area.

Of the 412 square miles, 436 have been surveyed in detail. According to the revenue survey returns, twenty-four square miles are occupied by the lands of alienated villages. The rest contains 229,189 acres or 86'02 per cent of arable land, 4269 acres or 1'60 per cent of unarable land, 8359 acres or 3'13 per cent of grass, and 24,595 acres or 9'23 per cent of villages sites, roads, rivers, and streams. From the 229,189 acres of arable land, 72,377 acres have to be taken on account of alienated lands in Government villages.

Aspect.

Except in the south-west where it is broken by hills, Karajgi is flat. It is crossed from east to wost by the Varda. The centre and south have a scanty covering of brushwood, but the rest of the subdivision except close to village sites is bare of trees. In the east the villages are large and far apart; in the west they are smaller and closer. Some stand on the banks of streams and some which have walls stand in the open plain. The people are fairly off.

Soil.

In the north and east the soil is black and in the south and west mostly red with an occasional plot of black.

Hills.

From the northern boundary of Raunebenur in the south-east a few spurs pass north into Karajgi. They make little show as the level of the south of Karajgi is higher than the level of the plain parts of Ranebennur. The Devgiri hill rises about 300 feet above the plain and has a temple of Tirmallappa on the top. The Kanvali hill rises 400 to 500 and the Kabur hill in the south-west

about 150 feet above the plain. Bush-covered hills in the west give cover to antelope and wild hog. The other hills are bare.

In some places in the south and west the climate is hot and feverish, but on the whole it is good. The rainfall is much the same all over the sub-division. At Karajgi during the ten years ending 1881 it varied from 13.36 inches in 1876 to 34.06 inches in 1873 and averaged 27.04 inches.

The Varda with a winding course of twenty-five to thirty miles flows north-east through the sub-division over a muddy and gravelly bed 300 to 600 feet broad and between steep banks. During the rains it is not fordable; but in the dry months, the water is so low in places that carts can cross. At Kohu, Karajgi, Nave, Rite, and many other villages ferries ply during the rains. The Tungbhadra, which forms the eastern boundary of the subdivision, up to February is crossed by two ferries at Galgnáth and Havnur. Between February and the end of May the Tungbhadra is fordable at many places. Many large and small ponds scattered over the sub-division furnish it with a good supply of water.

According to the 1882-83 returns farm stock included twenty-one riding and 3718 load carts, 7320 two-bullock and 1726 four-bullock ploughs, 24,194 bullocks and 14,216 cows, 2761 he-buffaloes and 9791 she-buffaloes, 551 horses, 29,145 sheep and goats, and 389 asses.

In 1881-82 of 129,001 acres the whole area held for tillage, 25,550 acres or 19.80 per cent were fallow or under grass. Of the 103,451 acres under tillage, grain crops occupied 51,210 acres or 49.50 per cent, of which 38,718 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, 7702 undor navani (K.) or káng (M.) Panicum italicum, 1959 under suve (K.) or vari (M.) Panicum miliare, 1910 under rice bhatta (K.) or bhat (M.) Oryza sativa, 600 under wheat godhi (K.) or ghau (M.) Triticum æstivum, 267 under rági (K.) or náchni (M.) Eleusine corocans, and 54 under spiked millet sejje (K.) or bajri (M.) Penicillaria spicata. Pulses occupied 12,410 acres or 11.99 per cent of which 4198 were under togari or tuvari (K.) or tur (M.) Cajanus indicus, 3656 under hurli (K.) or kulthi (M.) Dolichos biflorus, 3051 under hesaru (K.) or mug (M.) Phascolus radiatus, 491 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 63 under uddu (K.) or udid Phaseolus mungo, and 951 under other pulses. Oilseeds occupied 5415 acres or 5-28 per cent of which 941 were under sesame yellu (K.) or til (M.) 'Sesamum indicum, 9 under linseed agashi (K.) or javas (M.) Linum usitatissimum, and 4465 under other oilseeds. Fibres occupied 30,815 acros or 29.78 per cent of which 30,497 were under cotton hatti or arale (K.) or kapus (M.) Gossypium herbaceum, 244 under Bombay hemp sanbu (K.) or tág (M.) Crotalaria juncea, and 74 under Indian hemp pundi (K.) or ambádi (M.) Hibiscus Miscellaneous crops occupied 3601 acres or 3:48 per cent of which 2810 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 221 under sugarcane kabbu (K.) or (M.) Saccharum officinarum, 21 under tobacco hagesoppu (K.) or tambaku (M.) Nicotiana tabacum, and the remaining 549 under various vegetables and fruits.

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KARAJOI. People, 1881.

The 1881 population returns show that of 83,216 people 75.116 or 90°26 per cent were Hindus, 8096 or 9°73 per cent Musalmans. The details of the Hindu castes are: 2727 and 4 Christians. Bráhmans ; 30,757 Lingáyats ; 586 Lavánas, 427 Jains, and 123 Lad., traders; 2071 Maráthás, 1096 Radders, 246 Rajputs, 50 Malavárs, husbandmen; 1818 Páncháls, metal-workers; 583 Shimpis, tailors; 266 Gavandis, masons; 198 Niláris, indigo-dyers; 179 Lád-Survavanshis, butchers; 179 Badiges, carpenters; 161 Ilgeros, palm-tappers; 115 Sonars, goldsmiths; 82 Kammars, blacksmiths; 57 Killikiatars, labourers; 53 Kumbhárs, potters; 28 Medaz, bamboo-workers; 2343 Gánigárs, oilmen; 1170 Kostis, weavers; 844 Khatris, silk-dyers; 10,244 Kurubars, shepherds; 11 Garlis, cowherds; 6614 Bedars, hunters; 2816 Ambigs, fishermen; 771 Nádigárs, barbers; 576 Parits, washermen; 150 Bhois, litterbearers; 103 Chelvádis, Lingáyat beadles; 2207 Vaddars, diggers; 810 Koravars, mat and basket-makers; 12 Dombars, rope-dancers; 672 Gollárs, 102 Helávars, 44 Devdásás, 18 Gosávis, 17 Jogis, 8 Kshetridásás, and 8 Gondhalgárs, beggars; 3323 Mádigárs, leather-workers; 233 Holayás, labourers; 113 Kotegárs, beggars; 89 Samagárs, shoemakers : and 16 Dhors, tanners.

Kop.

Kod is in the extreme south-west of the district. It is bounded on the north by Hangal and Karajgi, on the east by Ranchennur, and on the south and west by Maisur. It contains 193 Government and eleven alienated villages, with an area of 400 square miles, a population of 80,345 or 200 to the square mile, and a yearly land revenue of £18,663 (Rs. 1,86,630).

Area,

Of the 400 square miles, 389 have been surveyed in detail. According to the revenue survey returns, fifteen square miles are The rest contains occupied by the lands of alienated villages. 191,648 acres or 77:56 per cent of arable land, 2016 acres or 0:81 per cent of unarable land, 3774 acres or 1.52 per cent of grass, 25,829 acres or 10.45 per cent of forests, and 23,811 acres or 9.63 per cent of village sites, roads, rivers, and streams. From the 191,648 acres of arable land 46,810 acres have to be taken on account of alienated lands in Government villages.

Aspect.

Kod is dotted with small hills and ponds some of which when full are two to three miles long. Many of the hillocks are bare but the range which separates Kod from Maisur is covered with brushwood and low forests. A great part of the country is watered and is covered with sugarcane fields and betel-palm gardens. The villages which are small and close together, are well shaded and lie in the open plain, most of them without walls.

Soil.

The soil is chiefly red; black soil scarcely occurs except in a isr

Hills

villages in the east.

The north and west have many small hills and knolls and the south is full of hills. In the south two nearly parallel steep and narrow ranges run east and west 400 to 600 feet above the plain. The northern range, which is about fourteen miles long, shuts off the Masur valley from the rest of th sub-divisions. It has no wild animals and except of grass and brushwood is bare. Besides a few bullock and pony tracks two cart roads cross it one from Hirekerur to Maisur and the other from Ratiballi to Maisur. The southern range, five to seven mile from the northern range, runs south-east falling gradually into the Tungbhadra. Its highest hill is Márávli which rises about 600 feet above the plain. Most of the range is steep and narrow. Two cart roads cross it, one close to and the other four miles west of the Márávli hill. Besides by these roads it is crossed by a few rugged pony and bullock tracks. The range is scantily covered with low forest which gives shelter to panthers, bears, and a few tigors.

As the greater part of the tilled land is watered, Kod, though cool and healthy in the hot weather is very feverish during the cold months. During the ten years ending 1881 the rainfall at Hirekerur the sub-division head-quarters varied from 15.96 inches in 1876 to

32.77 inches in 1877 and averaged 25.73 inches.

The Tungbhadra touches a few villages in the south-east corner. The Kumadvati rising in the Madak lake in Maisur, with a bed 150 feet broad and between steep banks, flows east across the subdivision. In the hot season it holds water in pools. Besides these rivers Kod has so many pends of various sizes that one-eighth of the area under tillage is watered.

According to the 1882-83 returns farm stock included eleven riding and 3895 load carts, 12,696 two-bullock and 1791 four-bullock ploughs, 34,801 bullocks and 23,224 cows, 5139 he-buffaloes and 11,608 she-buffaloes, 382 horses, 18,007 sheep and goats, and

239 asses.

In 1881-82 of 123,768 acres the whole area held for tillage 25,859 acres or 20.89 per cent were fallow or under grass. Of the 97,909 acres under tillage, grain crops occupied 65,539 acres or 66.93 per cent of which 30,281 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, 14,325 under rice bhatta (K.) or bhat (M.) Oryza sativa, 10,163 under rági (K.) or náchni (M.) Eleusine corocana, 6467 under navani (K.) or káng (M.) Panicum italicum, 4213 under sáve (K.) or vari (M.) Panicum miliare, 57 under wheat, godhi (K.) or ghau (M.) Triticum estivum, and 3 under spiked millet sejje (K.) or bájri (M.) Penicillaria spicata. Pulses occupied 7018 acres or 7.16 per cent of which 3474 were under hurli (K.) or kulthi (M.) Dolichos biflorus, 1894 under togari or turari (K.) or tur (M.) Cajanus indicus, 778 under hesaru (K.) or mug (M.) Phaseolus radiatus, 453 under gram kadli (K.) or harbhara (M.) Cicer arietinum, 165 under uddu (K.) or udid (M.) Phascolus mungo, and 251 under other pulses. Oilseeds occupied 3843 acres or 3.92 per cent of which 145 were under sesame yellu (K.) or til (M.) Sesamum indicum, 41 under Indian mustard sásive (K.) or rái (M.) Sinapis dichotoma, and 3657 under other oilseeds. Fibres occupied 3370 acres or 3.41 per cent of which 3100 were under cotton hatti or arale (K.) or kapus (M.) Gossypium herbaceum, 253 under Bombay hemp sanbu (K.) or tág (M.) Crotalaria juncea, and 17 under Indian homp pundi (K.) or Miscellaneous crops occupied ambádi (M.) Hibiscus caunabinus. 18,139 acres or 18:52 per cent of which 16,219 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescons, 1316 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, 91 under tobacco hágesoppu (K.) or tambúku (M.) Nicotiana tabacam, 4 under ginger shunti (K.) or alla (M.) Zinziber officinale, and the remaining 500 under various vegetables and fruits.

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Kod, People, 1881,

The 1881 population returns show that of 80,345 people 73,200 or 91-10 per cent were Hindus, 7138 or 8-88 per cent Musalmans, and 7 Christians. The details of the Hindu castes are: 1851 Brahmans; 35,778 Lingáyats; 608 Lavánás, 441 Jains, and 42 Teluga Oshnamarus, tradors; 2173 Marathas, 617 Kamatis, 502 Radders, 234 Rajputs, 96 Dásárs, 20 Halepáiks, husbandmen ; 1636 Pancháls, metal-workers; 1270 Gavandis, masons; 414 Shimpis, tailors; 260 Sonars, goldsmiths; 220 Jingars, saddle-makers; 186 Ilgerus, palm-tappers; 142 Badiges, carpenters; 137 Kumbhars, potters; 129 Killikiatars, labourers; 77 Niláris, indigo-dyors; 22 Kammárs, blacksmiths; 20 Medars, bamboo-workers; 517 Kostis, weavers; 400 Gánigárs, oilmen; 271 Hatgárs, shephords; 25 Gavlis, cowherds; 8086 Bedars, hunters; 901 Paris, washermen; 900 Chelvadis, Lingayat beadles; 319 Nadigars, barbers; 97 Bhois, litter-bearers; 2674 Vaddars, diggers; 482 Koravars, mat and basket-makers; 45 Dombars, rope-dancors; 421 Gollárs, 60 Holávars, 18 Gosávis, 15 Másúlars, 13 Jogis, 8 Budbudkis, and 2 Kshetridásás, beggars; 8858 Mádigárs, leather-workers; 141 Holayús, labourers; 35 Dhors, tunners; 31 Samagárs or Chámbhárs, shoemakers.

NAVALGUND.

Navalgund in the north of the district is bounded on the north by Belgaum, Ramdurg, and Badami in South Bijapur, on the cast by Ron and Gadag, on the south by Hubli, on the west by Dharwar and on the north-west by Belgaum. It contains ninety Government and seven alienated villages with an area of 562 square miles, a population of 87,832 or 156 to the square mile, and a yearly land revenue of £38,286 (Rs. 3,82,860).

Area.

Of the 562 square miles, all of which have been surveyed in detailtwenty square miles are occupied by the lands of alienated villages. The rest, according to the revenue survey returns, contains 334,212 acres or 96.08 per cent of arable land, 1980 acres or 0.56 per cent of unarable land, 106 acres or 0.03 per cent of grass, 294 acres or 0.8 per cent of forests, and 11,245 acres or 3.23 per cent of village sites, roads, rivers, and streams. From the 334,212 acres of arable land 94,025 acres have to be taken on account of alienated lands in

Aspect and Soil.

Hille.

Navalgund is a stretch of black soil with a few straggling bábhul trees, and village sites far apart except along the banks of streams. From the black level rise three steep sharp-pointed hills, Great Nargund, Chik or Little Nargund, and Navalgund. Of the three hills Great Nargund which was formerly fortified, about twelve miles north of Navalgund, is the largest, rising about 700 feet above the plain. Next to it, about fifteen miles north of Navalgund, comes Chik Nargund or Little Nargund, rising about 250 feet above the plain. The Navalgund hill, close to Navalgund town, rises about 300 feet above the plain. All three hills run from north-west to south-west and have ridged tops and sides covered

The black-soil plain of Navalgund is hotter in the hot months and colder in the cold months than the red-soil lands. Showers at the end of April greatly relieve the heat. The rainfall is

uncertain. At Navalgund, during the ten years ending 1881, the fall varied from 7.05 inches in 1876 to 40.23 inches in 1874 and

averaged 22.59 inches.

The water-supply is chiefly from rivers. For fifteen miles along the north-east boundary the Malprabha, over a muddy or sandy bed about 350 feet broad, between sloping earthy banks flows throughout the year. The river is fordable in the dry months and during the rains a ferry plies from Konur to Govankop in Bijapur. The Bennihalla, a brackish stream, a feeder of the Malprabha flows north-east through the length of the sub-division. During the rains it flows over its banks and causes much damage, but in the hot months it dwindles to a thread. The fine earth of its bed whose softness is said to have given the river its name of Benihalla or the Butter Stream, in places forms quicksands in which cattle are sometimes lost. Many villages have ponds, only a few have wells.

According to the 1882-83 returns the farm stock included fortyseven riding and 3948 load carts, 2263 two-bullock and 419 fourbullock ploughs, 20,446 bullocks, 6962 cows, 1729 he-buffaloes and 7392 she-buffaloes, 500 horses, 26,005 sheep and goats, and

1017 asses.

In 1881-82 of 210,208 acres the whole area held for tillage, 1420 acres or 0.59 per cent were fallow or under grass. Of the 238,788 acres under tillage, grain crops occupied 141,129 acres or 59 10 per cent of which \$2,906 were under wheat godhi (K.) or ghau (M.) Triticum cestivum, 57,791 under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, and 432 under navani (K.) or káng (M.) Panicum italicum. Pulses occupied 11,083 acres or 4.64 per cent of which 10,770 were under gram kadli (K.) or harbhara (M.) Cicer arietinam, 169 under hesaru (K.) or mug (M.) Phascolus radiatus, 79 under hurli (K.) or kulthi (M.) Dolichos biflorus, 58 under togari or tuvari (K.) or tur (M.) Cajanus indicas, and 7 under other pulses. Oilseeds occupied 18,525 acres or 7.75 per cent of which 6414 were under linseed agashi (K.) or javas (M.) Linum usitatissimum, and 12,081 under other oilseeds. Fibres occupied 67,866 acres or 28-12 per cent the whole of them under cotton hatti or arale (K.) or kupus (M.) Gossypium herbaceum. Miscellaneous crops occupied 185 acres or 0.07 per cent of which 14 were under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, one under tobacco hágesoppu (K.) or tambáku (M.) Nicotiana tabacum, and the remaining 170 under various vegetables and fruits.

The 1881 population returns show that of 87,832 people 79,680 or 90.71 per cent were Hindus, 8145 or 9.27 per cent Musalmáns, and 7 Christians. The details of the Hindu castes are: 2513 Bráhmans; 30,519 Lingáyats; 771 Jains, 394 Komtis, 350 Telugu-Banjigárs, 95 Láds, 70 Lavánás, 8 Gurjars, and 4 Márwáris, traders; 5639 Radders, 3395 Maráthás, 197 Rajputs, and 62 Dásárs, husbandmen; 1587 Pancháls, metal-workers; 660 Gavandis masons; 590 Shumpis, tailors; 469 Kumbhárs, potters; 352 Sonárs, goldsmiths; 336 Badiges, carpenters; 191 Kanmárs, blacksmiths; 52 Medars, bamboo-workers; 40 Lád Suryavanshis, butchers; 40 Niláris, indigo-dyers; 3880 Gánigárs, oilmen; 1870 Kostis, weuver⁸; 12,106 Kurubars, shepherds; 15 Gavlis, cowherds; 3742 Bedars, hunters;

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Stock.

('rop*, 1881-82.

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Navalgund. People, 1881. 1385 Ambigs, fishermen; 905 Nadigárs, barbers; 756 Parits, washermen; 221 Bhois, litter-bearers; 51 Chelvádis, Lingáyat beadles; 31 Kalávants, dancing girls; 1238 Vaddars, diggers; 419 Koravars, mat and basket-makers; 5 Dombars, rope-dancers; 117 Gollárs, 55 Budbudkis, 18 Másálars, 13 Joshis, 9 Helávars, 8 Jogis, 2 Kshetridásás, beggars; 2026 Mádigárs, leather-workers; 2007 Holayás, labourers; 449 Samagárs, shoemakers; and 18 Dhors, tanners.

RANEBENNUR.

Ra'nebennur is in the extreme south-east corner of the district. It is bounded on the north by Karajgi, on the east and south by the Tungbhadra which separates Ranebennur from Maisur and Belair in Madras, and on the west by Kod. It contains 131 Government and twelve alienated villages with an area of 405 square miles, a population of 74,213 or 183 to the square mile, and a yearly land revenue of £15,804 (Rs. 1,58,040).

Area.

Of the 405 square miles, 395 have been surveyed in detail-According to the revenue survey returns, nineteen square miles are occupied by the lands of alienated villages. The rest contains 194,476 acres or 78.67 per cent of arable land, 2568 acres or 1.03 per cent of unarable land, 26,594 acres or 10.75 per cent of grass, and 28,553 acres or 9.52 per cent of village sites, roads, rivers, and streams. From the 194,476 acres of arable land, 42,406 acres have to be taken on account of alienated lands in Government villages.

Aspect.

The country is generally flat with a low range on the north and a group of hills near Airáni in the east. Much of the land near the hills is covered with low brushwood. Except Ranebennur the villages, are small and close together chiefly along the banks of the Tungbhadra and other streams. Almost all villages are shaded by trees and the large ones are walled.

Soil.

The soil is black in the low-lying parts and red on the bills and uplands.

Hills.

In the low northern range the hills rise 200 to 500 feet above the plain generally with sloping sides covered with brushwood which give shelter to wolves and deer. The range is crossed by many cart tracks. Near Motebennur in the north several bare conical hills rise about 150 feet from the plain, and, with several breaks through which carts pass, a low narrow bare range stretches about ten miles from Byádgi in the north-west to Halgiri in the south-west. In the extreme east near Airáni on the Tungbhadra, surrounded by groups of smaller hills, is the highest point in Ránebennur, a peak 600 feet above the plain with sloping bushy sides which give shelter to wolves.

Climate.

The climate is somewhat hotter in the east than in the west, and on the whole is good. In the beginning of April, the hottest part of the year, the thermometer rises to 100° or 102°. With the first rains in May the air cools till it falls to 75° or 70° in June, and from that seldom rises much before October. The rainfall is fairly equal over the whole sub-division. At Ranobennur, during the ten years ending 1881, the fall varied from 10·13 inches in 1876 to 35·40 inches in 1874 and averaged 22·40 inches.

Ranobennur is well supplied with water. The Tungbhadra flows between steep banks along a sandy bed about half a mile broad. It is bridged at Harihar and ferries ply at many places. The Kumadvati a feeder of the Tungbhadra flows east about fifteen miles along a sandy bed about 300 feet wide and between steep banks. Other streams flow south to join the Tungbhadra. Besides the rivers and streams are many pends, the largest of which are at Ranebennur and Malapur.

According to the 1882-83 returns farm stock included fifteen riding and 3111 lead carts, 7043 two-bullock and 2181 four-bullock ploughs, 23,646 bullocks and 12,409 cows, 2010 he-buffaloes and 9159 she-buffaloes, 419 horses, 31,619 sheep and goats, and 1305 assoc.

In 1881-82 of 110,137 acres the whole area held for tillage, 15,077 acres or 13.63 per cent were fallow or under grass. Of the 95,060 acres under tillage, grain crops occupied 49,862 acres or 52.45 per cent of which 38,940 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgare, 8076 under navani (K.) or king (M.) Panicum italicum, 963 under sáve (K.) or vari (M.) Panicum miliare, 359 under rice bhatta (K.) or bhát (M.) Oryza satira, 337 under rigi (K.) or náchni (M.) Eleusine corocana, 314 under wheat godhi (K.) or ghau (M.) Triticum wstivum, 26 under spiked millet sejje (K.) or bajri (M.) Penicillaria spicata, and 817 under other grains of which details are not given. Pulses occupied 11,580 acres or 12:18 per cent of which 6097 were under hurli (K.) or kulthi (M.) Dolichos biflorus, 3199 under togari or tuvari (K.) or tur (M.) Cajanus indicus, 1071 under gram kadli (K.) or harbhara (M.) Cicer nrictinum, 452 under hesaru (K.) or mug (M.) Phaseolus radiatus, 9 under uddu (K.) or udid (M.) Phaseolus mungo, and 452 under Oil-seeds occupied 2891 acres or 301 per cent of other pulses. which 358 were under sesame yellu (K.) or til (M.) Sesamum indicum, 7 under linseed agashi (K.) or javas (M.) Linum usitatissimum, and 2529 under other oil-seeds. Fibres occupied 23,120 neres or 21:32 per cent of which 22,777 were under cotton hatti or arale (K.) or kapus (M.) Gossypium herbacoum, 181 under Indian hemp pundi (K.) or ambidi (M.) Hibiscus cannabinus, and 162 under Bombay hemp saubu (K.) or tág (M.) Crotalaria juncea. Miscellaneous crops occupied 7604 acres or 7:99 per cent of which 6690 were under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, 431 under tobacco hügesoppu (K.) or tambüku (M.) Nicotiana tabacum, 108 under sugarcano kabbu (K.) or us (M.) Saccharum officinarum, and the remaining 375 under various vegetables and fruits.

The 1881 population returns show that of 74,213 people, 68,037 or 91-67 per cent were Hindus, 6172 or 8:31 per cent Musalmans, and 4 Christians. The details of the Hindu castes are 1174 Brahmans; 28,744 Lingayats; 310 Lavanas, 78 Lads, 52 Jains, 11 Telugu-Oshnamarus, and 5 Chunaris, traders; 3141 Radders, 2089 Marathas, 390 Kamatis, 204 Rajputs, 201 Dasars, husbandmen; 2060 Panchals, metal-workers; 574 Shimpis, tailors; 315 Gavandis, masons; 141 Badiges, carpenters; 77 Kumbhars, potters; 71

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Kammárs, blacksmiths; 71 Killikiatars, labourers; 53 llgers, palm-tappers; 47 Niláris, indigo-dyers; 42 Sonárs, goldsmiths; 38 Lád-Suryavanshis, butchers; 17 Jingars, saddle-makers; 12 Medars, bamboo-workers; 3482 Kostis and 1986 Hatgárs, weavers; 962 Gánigárs, oilmen; 8926 Kurubars, shepherds; 47 Gavlis, cowherds; 5261 Bedars, hunters; 715 Parits, washermen; 456 Chelvádis, Lingáyat beadles; 294 Nádigárs, barbers; 17 Bhois, litter-bearers; 1177 Vaddars, diggers; 262 Koravars, mat and blasket-makers; 73 Dombars, rope-dancers; 645 Gollárs, 85 Josbis, 3 Bháts, beggars; 3441 Mádigárs, leather-workers; 212 Holayás, labourers; 39 Kotogárs, beggars; 32 Samagárs, shoemakers; and 5 Dhors, tanners.

Ron.

Ron, in the north-east corner of the district, is bounded on the north by Bádámi in Bijápur, on the east by the Nizám's territory, on the south by Gadag, and on the west by Navalgund. It contains seventy Government and four alienated villages with an area of 370 square miles, a population of 60,724 or 161 to the square mile, and a yearly land revenue of £16,447 (16,14,470).

Area.

Of the 370 square miles, 334 have been surveyed in detail-According to the revenue survey returns, thirty-six square miles are occupied by the lands of alienated villages. The rest contains 221,761 acres or 96-35 per cent of arable land, 6334 acres or 2.75 per cent of unarable land, 223 acres or 0.09 per cent of grass, and 1830 acres or 0.70 per cent of village sites, reads, rivers, and streams. From the 221,761 acres of arable land 57,525 acres have to be taken on account of alienated lands in Government villages.

Aspect,

The sub-division is one stretch of rich black soil, without a hill and with hardly an upland, highly tilled, with bare large villages, on the banks of streams or in the open plain. The people are skilful hardworking and well-to-do husbandmen.

Soil.

Except a little tract in the east and north where it is red the soil is rich black.

Climate.

The rainy months are fairly pleasant, but of late years the cold weather has been feverish and the rest of the year is het and dry. At Ron, during the ten years ending 1881, the rainfall varied from 7.58 inches in 1876 to 37.41 inches in 1874 and averaged 23.81 inches.

Water.

The Benihalla which flows into the Malprabha at the north-east corner of Ron and the Malprabha form the north-west boundary for about seventeen miles. The Malprabha flows east, over a muddy and sandy bed between sloping and carthy banks. The river is fordable except in the rains and has no ferry. Most villages have small ponds of drinking water and some villages have wells, but of brackish water. On the whole the water-supply is poor.

Stock.

According to the 1882-83 returns farm stock included five riding and 2574 load carts, 3784 two-bullock and 635 four-bullock ploughs, 16,141 bullocks and 6812 cows, 1438 he-buffaloes and 6082 shebuffaloes, 289 horses, 20,851 sheep and goats, and 435 asses.

Crops, 1881-82. In 1881-82 of 163,295 acres the whole area held for tillage, 3452 acres or 2·11 per cent were fallow or under grass. Of the 159,843 acres under tillage, grain crops occupied 72,081 acres or 45·09 per

cent of which 50,520 were under Indian millet jola (K.) or jvári (M.) Sorghum vulgaro, 16,519 under wheat godhi (K.) or ghau (M.) Triticum wstivum, 2982 under navani (K.) or káng (M.) Panicum italicum, 1643 under spiked millet sejje (K.) or bájri (M.) Penicillaria spicata, 344 under save (K.) or vari (M.) Panicum miliare, and 73 under rice bhatta (K.) or bhát (M.) Oryza sativa. Pulses occupied 10,518 acres or 6.58 per cent of which 5628 were under gram kadli (K.) or harbhara (M.) Cicer arietinum, 1924 under togari or tuvari (K.) or tur (M.) Cajanus indicus, 1866 under hesaru (K.) or mug (M.) Phaseolus radiatus, 460 under hurli (K.) or kulthi (M.) Dolichos biflorus, and 640 under other pulses. Oilseeds occupied 9798 acres or 6.13 per cent of which 5599 were under linseed agashi (K.) or javas (M.) Linum usitatissimum, 310 under sesame yellu (K.) or til (M.) Sesamum indicum, and 3889 under other oilseeds. occupied 67,105 acres or 41.98 per cent all of them under cotton hatti or arale (K.) or kápus (M.) Gossypium herbaceum. Miscellaneous crops occupied 341 acres or 0.21 per cent of which 134 were under tobacco hágesoppu (K.) or tambáku (M.) Nicotiana tabacum, 32 under sugarcane kabbu (K.) or us (M.) Saccharum officinarum, one under chillies menasinakai (K.) or mirchi (M.) Capsicum frutescens, and the remaining 174 under various vegetables and fruits.

The 1881 population returns show that of 60,724 people, 56,160 or 92.48 per cent were Hindus, 4562 or 7.51 per cent Musalmans, and 2 Christians. The details of the Hindu castes are: 4849 Brahmans; 19,750 Lingáyats; 93 Lads or South Gujarátis; 70 Jains and 24 Lavánás, traders; 2959 Radders, 947 Maráthás, 143 Dásárs, and 91 Rajputs, husbandmen; 1464 Páncháls, metal-workers; 312 Kumbhárs potters; 310 Gavandis, masons; 211 Shimpis, tailors; 187 Sonárs, goldsmiths; 147 Badiges, carpenters; 88 Ilgerus, palm-tappers; 88 Kammars, blacksmiths; 58 Killikiatars, labourers; 51 Lad-Suryavanshis, butchers; and 24 Medars bamboo-workers; 3926 Gánigárs, oilmen; 1022 Kostis and 347 Hatgárs, weavers; 8095 Kurubars, shepherds; 6 Gavlis, cowherds; 4068 Bedars, hunters; 635 Nadigars, barbers; 581 Parits, washermen; 307 Ambigs, fishermen; 31 Bhois, litter-bearers; and 19 Chelvadis, Lingayat beadles; 1067 Vaddars, diggers; 381 Koravars, mat and basket-makers; 2 Dombars, rope-dancers; 142 Gollars, 31 Budbudkis, 28 Gosávis, 11 Jogis, and 9 Gondhalgars, beggars; 2319 Mádigárs, leather-workers; 1161 Holayás, labourers; 95 Samagárs, shoemakers; and 11 Dhors, tanners.

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> Ron. Crops, 1881-82.

People, 1881. Chapter Lo THE B 18

CHAPTER XIV.

PLACES.

Chapter XIV. Places.

Abbigeri, a large village seven miles south of Ron with in 1891 a population of 3268, has black stone temples of Ishvardev and Jotlingdev, each with an inscription.1

ABLUR.

Ablur village two miles west of Kod, with in 1881 a population of 752, has temples of Basappa and Somnath. There are three inscriptions in the temple of Basappa, dated 1100, 1119, and 1144, and one in the temple of Somnath to the right of the god dated 1168.2

Apur.

Adur is a large village ten miles east of Hangal, with in 1881 a population of 1151. It is mentioned in a twelfth century inscription under the name of Pándipur, and till 1862 was the head-quarters of a petty division. To the east of the village is the temple of Kalleshvar Mahadev with an inscription on the south face dated 1044. There are two other inscriptions one in a field dated 1034 and another undated. The undated inscription is in twenty lines on a stone tablet filling a space 3' 7" high and 2' 33" broad. The first fourteen lines are in Sanskrit and the last five in Old Kanarese. The Sanskrit inscription records the grant of a field for the charity hall or dánashála and other purposes of a Jain temple built by one of the village headmen. In the fourth line Vaijayanti or Banavási in North Kánara seems to be mentioned; but lines two to five are too worn to be read. The Kanarese inscription in the last five lines is well preserved. It records that during the reign of Kirttivarma about A.D. 560 as supreme sovereign, and during the government of the city of Pandipura by a certain chief Sinda, Donagamunda Elagamunda and others, with the leave of king Madhavatti, gave to the temple of Jinenara for worship and offerings, eight mattals of rice land, by the royal measure, to the west of Karmagalur village Though the inscription is not dated, the titles of Kirttivarma and the style of the characters leave little doubt that the Kirttivarma is the sixth Early Chalukya king of that name (A.D. 567). The existence of this inscription in the heart of the Kadamba territory supports the statement made in the inscription (A.D. 634) of

¹The temple and inscription details in this chapter are from Dr. Burgess' Lists of Antiquarian Remains in the Bombay Presidency, pp. 11-48.

²Mr. Fleet (History of the Kanarese Districts of the Bombay Presidency, 52, 55, 59) also mentions inscriptions of the Western Chalukya kinga Someshvar III. (1126-1138) and Someshvar IV. (1182-1189), and of the Kalachuri usurper Bijjala (1156-1138). . 1107).

Kirttivarma's son Pulikeshi II. at Aihole in South Bijápur that Kirttivarma defeated the Kadambas. Adur has a fourth inscription dated 904 of the thirteenth Ráshtrakuta king Krishna II. (A.D. 875-911) or Akalavarsha as he is called in the inscription. The inscription also mentions a chief noble or mahásámanta of the Chellketan family as governing the Banavási Twelve-thousand.2 The first or 1044 inscription is of the sixth Western Chalukya king Someshvara I., of whose time forty inscriptions have been found varying in date from 1012 to 1068.3

Airani, twelve miles east of Ránibennur, is a large village on the Tungbhadra with in 1881 apopulation of 1778. Melons are grown in the river, and before the 1876-77 famine superior blankets used to be made for local use by Kurubars. The people died or left the place and the blanket-weaving has stopped. In 1790 Captain Moor, who accompanied an English detachment sent to help the Marathas against Tipu Sultán, mentions Airani as a respectable little fort. a town of some note with a weekly market.4 In 1800 (20th June) Colonel Wellesley, afterwards Duke of Wellington, in his expedition against the notorious Marátha freebooter Dhundia Vágh, sont a patrol to reconnoitre Airani fort. He meant to attack the fort on the morning of the 21st June, but the garrison left it during the night of the 20th and the troops took peaceful possession on the In 1812 Captain Burgoyno and Lieutenant Bell, who were appointed to examine the Southern Marátha forts, described Airani as a work of considerable strength on the left bank of the Tungbhadra which ran close under the east front with high banks. The fort was built irregularly on a small knoll. It had an inner line of works surrounded for about fifty yards by an outer line with a ditch on the west and south-west fronts. The outer line of works consisted of a faussebraye or mound outside the rampart much injured on the north and south but in good repair on the east or river side. The entrance to the outer works was on the north by three gateways through the works leading over the ditch. All the gates as well as their flank defences were out of repair. Three ruined gateways led from the outer into the inner works. The inner fort stretched north-east to south-east about 250 yards long by 100 yards broad. The west and south-west defences, being the strongest parts of the inner fort, consisted of five large stone bastions about twenty-five feet high joined by stone curtains. The east face had no bastions, and like the north-east face it works were much ruined. There was nothing inside the fort except a ruined palace and a small well with a doubtful supply of water. A small passage led out of the fort to the river whence an ample supply could be obtained. The ditch on the west and south-west fronts of the outer line of fortifications was dry and useless, being easy of ascent and descent. The village of Airani lay above 100 yards to the north of the fort. To the southwest of the village, separated from the ditch by a road, was a large

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AIRANI.

Fort.

² Fleet's Kanarese Dynastics, 36, 85. 1 Compare Indian Antiquary, VIII. 237.

Fleet's Kánarese Dynastics, 47.
 Moor's Narrative of Captain Little's Detachment, 236.
 Duke of Wellington's Supplementary Desputches, India (1797 - 1805), II. 28.

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pond, and about 800 yards further was a hill which commanded the fort. The greater part of the inner fort was in good order and strong, and the broken part was easy of repair. The outer line could not be held.1

Alnávar.

Places.

Alna'var, twenty miles west of Dharwar, is a large village well placed in the south-east corner of the crossing of the Belgaum-Halifal and Dharwar-Goa roads. Whon the Marmagao-Belari railway is completed, Alpavar will have a third class station 165 miles west of Belári.

AWARGOL

Amargol is a large village on the Dharwar-Hubli read five miles north-west of Hubli, with in 1881 a population of 1547. In the middle of the village is a partly rained temple of Shankarling built by Jakhanáchárya, who, according to one account, was a Kshatriya prince who atoned for the sin of Brahman killing by building temples; according to another story he was a l'anchal pupil of Vishvakarma the divine architect who built the temples to try his skill. Near it is the temple of Banshankari Devi. The Shankarling temple is built of black and light-coloured granite, and has walls and pillars carved with figures of gods. The expenses of the temple are met from alienated lands. In front of the temple is a broken and defaced inscription slab.

ABUNBHÁYI.

Aminbha'vi is a large village about seven miles north-east of Dhárwar, with in 1881 a population of 3392. Under the Peshwas it was the chief town of a group or samat of eight villages. To the north of the village is an old Jain temple of Neminath the Twentysecond Tirthankar about 120 feet long, with numerous pillars. There are two small blackstone Shaiv temples of Kalmeshvar and On two wooden pillars of the Kalmeshvar temple Mallikarjun. nine feet apart is a record of the Vitthalpanti land measure." Six inscriptions have been found in the village, one in each of the three temples, two dated 566 and 1113 near an old well to the south of . the mansion of the Aminbhávi Desái, and one near the house of a barber dated 1547. The inscription dated 566 is on a stone-tablet which has disappeared. The name of the king is the early Chalukya Pulikeshi II. (610-634), the contemporary of the Chinese pilgrim Hiwen Thsang (629-645), but the date in the inscription appears from other evidence to be wrong.3

ANNIGERI.

Annigeri, on the Dhárwár-Gadag road with in 1881 a population of 7211, is an old petty divisional centre about ten miles south-east of Navalgund. The 1872 census showed a population of 7098, of whom 5371 were Hindus and 1727 Musalmans. Annigeri is remarkable for a temple of Amriteshvar locally ascribed to Jakhanacharya. It is in the middle of the town built of black stone, of considerable size, with a roof supported on seventy-six pillars. The walls are covered with interesting mythological sculptures. are six inscriptions in the temple varying from 1157 to 1208. The

¹ Report dated Belgaum, 5th July 1842.

^{&#}x27;Tho roord is in Dovangari lotters 'Shri Vitthalpanti Chammar don mekha,' that is The two marks of the illustrious Vitthalpant (1). See above p. 440. Flect's Kanarese Dynasties, 23.

carliest is dated 1157; the next to the west of the south gateway of the temple is dated 1189; the third is dated 1200; the fourth, which is very long, is dated 1202; the fifth on a pillar in the south gateway is dated 1207, and the sixth to the east of the south gateway is dated 1208. There are seven smaller temples, each with one or two inscriptions. Banadashankari's temple has two inscriptions, one in front of the temple door dated 1162, the other in the temple yard dated 1186. Basappa's temple to the south of the Hubli gate has in front of it an inscription dated 1172. There is a Jain temple or basti with an inscription dated 1071. Gachchin Basappa's temple near the police station has two inscriptions, one on a pillar dated 1197, the other to the south of the temple dated 1539. The 1539 inscription is well preserved and belongs to the Vijaynagar king Achyutráy (1508-1542). Hiri Hanumant's temple has to the left of the temple door an inscription dated 1157. Mailar's temple has near a well close to the south wall of the temple an inscription dated 1097, and Puraddappa's temple, to the east of the town, has an inscription dated 1184.

The earliest date at Annigeri is 1071, but at present the earliest information regarding the town is that in 1161 the Kalachuri chief Bijjala, who overthrew the Western Chalukyas, made it his capital. In that year Bijjala's governor Dandnáyak Shridhar is mentioned as governing at the capital of Annigeri. As inscriptions of Bijjala's son Someshvar (1167-1175) are found at Annigeri, it probably remained under the Kalachuris at least till 1175. In 1184 the Western Chálukya king Someshvar IV. (1182-1189), taking advantage of the religious dissensions between the Jains and the newly started Lingáynts at the capital Kalyan, succeeded for a short time in re-establishing the semblance of Chálukya sovereignty. In 1184 Someshvar's feudatory Dandnayak Barmarasa is mentioned as governing at the capital of Annigeri.2 In 1189 an inscription at Annigeri mentions it as the capital from which the Mahamandaleshvar Bachiraja or Bachana, the feudatory of Bhillama the third Devgiri Yadav (1187-1191), was governing the Belvola country.3 Soon after Annigeri appears from one of his inscriptions to have passed with the greater part of Dhárwár to the great Hoysala Ballál ruler Vir Ballál or Ballál II., whose inscriptions range from 1192 to 1211. Annigeri appears in the inscriptions as one of Vir Ballal's capitals in Dharwar.4 the 17th of July 1800, Dhundiah Vágh the Karnátak freebooter, when pursued by Colonel Wellesley, is mentioned as encamping at Annigeri in his flight from Dambal.5 In October 1800 Colonel Wellesley gave orders for making tents at Annigeri, Dhárwar, and Hubli, three places famous for cloth.6 At the beginning of British rule Annigeri and the villages belonging to it formed the jághir of the Nipani chief. It lapsed to Government in 1839 from failure of heirs. In 1827 Annigeri had 450 houses, fourteen shops, and some wells.7

Chapter XIV. Places. Annigeri. Temples.

History,

Fleat's Kanareso Dynastics, 51.

² Fleot's Kánarcso Dynasties, 55.

Floot's Kanarese Dynastics, 72.
 Floet's Kanarese Dynastics, 72.
 Supplementary Despatches, II. 57.
 Clunes' Itinerary, 72. ⁴ Fleet's Kanarese Dynasties, 67, 68. ⁶ Supplementary Despatches, II. 203.

Chapter La The B Sh 18 Chapter XIV. Places. Arlekatti, a small village five miles north of Kod, with in 1881 a population of 465, has three inscriptions in Old Kanarese characters.

ARLESHVAR.

Arleshvar, a small village five miles north-east of Hangal, with in 1881 a population of 779, has a stone temple of Kadambeshra with three inscriptions, one on a pillar dated 1076 to the south of the image, the second dated 1088 on the alligator arch of the temple, and the third on a pillar in front of the chief temple gate whose date is of doubtful accuracy.

ARTAL,

Artal, nine miles north-west of Bankapur, has several temples and old inscriptions.¹

ASUNDI.

Asundi, a small village three miles south-west of Gadag, with in 1881 a population of 848, has a temple of Bommappa with an inscription dated 1027 and a temple of Hanumant with an inscription dated 1053.

ÁSUNDI.

A'sundi, a small village about five miles west of Ránchennur, has a temple of Kalleshvar outside village limits. The temple has three inscriptions, two of them dated 1112 and 1143 (S. 1034 and 1065). The third is much worn.

BALAGNUR,

Balagnur, a large village fourteen miles north of Gadag, with in 1881 a population of 1734, has behind the wall of a temple of Virbhadra an inscription dated 1192 in the reign of the great. Hoysala king Ballál II. or Vir Ballál (1192-1211).

BALAMBID.

Balambid, a small village about five miles sonth-west of Kod, with in .1881 a population of 391, has a temple of Vishpariháreshvar and Basava in the Jakhanáchárya style.³ The temple has five inscriptions, one to the left of the god dated 1057 (S. 979), another dated 1079 (S. 1001), the third on the south of the temple door dated 1087 (S. 1009), and the fourth and fifth dated 1118 and 1228 (S. 1040 and 1150).

BALAMED.

Balambid, a small village eight miles east of Hángal, with in 1881 a population of 845, has a temple of Kallameshvar (30 × 22) with carvings both inside and outside and a temple of Rámeshvar. In front of the Kallameshvar temple are two inscriptions dated 1122 and 1165. The Rámeshvar temple also has two inscriptions one to the south dated 1117, the other to the north whose date has not been read.

BALEHALUI.

Balehalli, or the Village of Plantains, a small village six miles south-west of Hángal, with in 1881 a population of 270, has temples of Mailárdev and Mallikárjun and eleven inscriptions. Mailíkárjun's temple has two inscriptions one on a hero-stone or virgal dated 1076, and the other dated 1049. Mailárdev's temple has one inscription dated 1144, which, like the 1146 inscription, is in the reign of the Western Chálukya king Jagadekamalla II. (1138-1150). The other six inscriptions have not been read. Outside of the village in survey number 136 is a twelfth inscription.

Mr. J. R. Middleton, C.S.
 Part of the stones of the temple have been used to build a pond at Hirokern about two miles to the south.

⁴ Fleet's Kanarese Dynasties, 52. Under the Sanskrit name Kadalipura, Bálehalli is mentioned in the 1148 inscription as a minorcapital of Jagadekamalla II, Ditto, 53 note 2.

Balur, a small village three miles south-east of Hangal, with in 1881, a population of 251, has a temple of Ramling with an inscription dated 1125 (S. 1047). To the south of the village near a pend is an inscribed here-stone or virgal dated 1242.

Banikop, a small village two miles north-east of Shiggaon, with in 1881 a population of 269, has a temple of Dharvaráy, with two inscriptions one $2' \times 1'$ on its wall, and the other $2' 6'' \times 1'$ 9" in front of it.

Banka'pur or Shahakizar, with in 1881 a population of 6037, is the chief town in the Bankapur sub-division about forty miles south of Dharwar. The 1872 census showed a population of 6268, of whom 4498 were Hindus and 1770 Musalmans. The 1881 census gives 6037 or a decrease of 231. Of the 1881 total 4298 were Hindus and 1739 Musalmans. The greater part of the Hindus were Lingayats. Bankapur has a ruined fort, a post office, and two temples. A weekly market is held on Tucsdays when coarse cloth, blankets, oil, and metal vessels are sold.

In 1826 a committee of inspection described Bankapur fort as onco a strong fortress with a large and deep ditch, but either allowed to go to decay or demolished on several sides. The granite ramparts and gateways on one side were in good order, the rest was out of repair.1 The two temples are a Jain basti or dwelling, that is shrine, of Rangasvámi Nagareshvar, and a Shaivite temple of Siddheshvar. The Jain shrine, which is usually called Arvattukambhada-basti or the sixty column temple, is a fine large old building partly ruined and a good deal buried. The temple is in a corner of the old fort.2 One of the fort walls runs across the back of the shrine and is built on it. The great open hall of this temple is supported by sixty columns, which give it its name. These are all very carefully wrought in close-grained dark slate. Most of the middle pillars have round finely polished shafts. The outer face of the low parapet wall which runs round the hall is towards the top divided into small panels by pairs of little pilasters. Below tho panels is a hand of little shikhars or spires of the northern type set to close together that there are upwards of 200 of them round the About the outer pillars runs a fine deep carved cornico ribbed underneath. Between the hall and the shrine have been one or two smaller rooms, but they are so ruined that their outline cannot be made out. Traces remain of two beautiful open carved windows once filled with florid work. Just in front of the shrine is a small closed hall. The doorway under the perch on the south side of this hall is one of the best doorways in the Bombay-Karnatak. Unfortunately the human figures which adorned the bottoms of each side have been removed leaving unsightly sockets. If this temple were less ruined and overgrown, it would rival, if not surpass, the Trikuteshvar and Sarasvati temples at Gadag. There are six inscriptions four within and two without the temple in Old Kanarese character and language. Of the four within the

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BANIKOP.

BANKAPUR.

Fort.

Temples.

In 1750 Tiestenthaler (Description, 500) notices Bankapur as a well guarded fork. Mr. H. Cousens, Head Assistant Bombay Archeological Survey.

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Places.
BANKAPUR.
Temples.

temple three are let into the wall to the right of the shrine door and one is on the left wall. Of the first three the uppermost on the right is in thirty-nine lines of about twelve letters each. It records grants made to the god Nagareshvardev of Bankapur in 1138 the twelfth year of the reign of the Western Chalukya king Bhulokamalla.¹ The next below consists of sixteen lines of about twenty-three letters each. It records a grant by a private individual named Bhammagavunda of Kiriya or Little Bankapur to the god Nagareshvardev of Bankápur. The lowest of the three is in twelve lines of about twenty-three letters each. It records a grant made by a local governor or Dandanayak in the reign of the Western Chalukya king Tribhuvanmalla II. better known as Vikramaditya VI. (1073-1126). The date is effaced, but, as the name of the year is Shrimukh, it must be the eighteenth year of Vikramaditya's reign or A.D. 1091. The inscription on the left hand is in thirtyseven lines of about sixteen letters each. It records grants made by one Madigavunda and other headmen to the Jain temple of Kiriya Bankapur in the Shubhakrit samvatsar being the forty-seventh year (1120) of the Chálukya king Vikrama that is Vikramáditya YL (1073-1126). The two outside inscriptions are one above another on the walls to the left of the south entrances of the shrine. They are both in Old Kánarese character and language and are well preserved The upper inscription is in nine lines and has several rudely cut emblems at the top. In the centre are a ling and priest, on their right a cow and a calf, and on their left a figure of Basara The inscription is incomplete. After a salutation to Shiv it appears to record something regarding a Kadamba chief, who, among other titles, is called the excellent supreme lord of Banavásipur, and the favoured of the god Jayanti Madhukeshvar.2 Two blank stones separate the lower inscription from the upper with which it seems not to be connected. It is in six lines of verse, each line about twentythree letters and two letters over in the seventh line. The verses are in praise of a certain Simha or Singa of whom no details are given. The verses contain nothing of interest and the inscription is undated.

The temple of Siddheshvar is smaller than the Jain shrine, and is not so old. It is built of black stone with three doors on the east. The walls have carved figures and the roof is supported on eight pillars. The temple enjoys a Government grant of land. Leaning against a wall to the right of the east entrance of the fort is a large inscribed stone tablet of fifty-nine lines each line of about thirty-seven letters in Old Kánarese. At the top of the tablet are defaced emblems, a ling in the middle, a seated or kneeling figure on the right, with the sun above and a cow and calf beyond it. To the left of the ling is an officiating priest with the moon above him, and, beyond the moon, a figure of Basava. The inscription is dated 1055-56 (S. 977 Manmatha samvatsara), and records a grant of land to a Jain temple while the Chálukya king Gangapermánadi g

This is Someshvar III. (1126-1138). Fleat's Kánarese Dynasties, 52.
 Madhukeshvar is the great temple in Banayási in North Kánara. Details are girm in Bombay Gazetteer, XV. Part II. 261.

Vikramadityadov, son of Trailokyamalladov, was ruling the Gangavadi Ninety-six thousand and the Banavási Twelvo-thousand, and while the great chieftain Harikesaridev, the glory of the family of the Kadainba emperor Mayarvarma, was governing the Banavasi Twelvethousand as his underlord. The grantors are Harikesaridev and his wife Lachchaladevi, the assemblage of the five religious colleges of Bankapur, the guild of the chief townspeople or nagarmahajan and The Sixteen.2

The earliest known mention of Bankapur is in a Kolhapur Jain MS. dated 898 where the famous city of Bankapur, the greatest among cities, is described as having been called after himself by the Chellaketan chief Bankeyaras or Bank the Dharwar underlord of the Rashtrakuta king Amoghvarsh (851-869).8 In 1055 Bankapur was governed by the Kadambas (1050-1200) as vassals of the Western Chálukyas (973-1192). At that time Bankapur seems to have been an important Jain centre, with a Jain temple' and five religious colleges. In 1071 Udayáditya of the Ganga family was reigning at the city of Bankapur. In 1091, 1120, and 1138 grants were made to the Jain temple, which is called in the inscriptions the temple of Nagareshvar, during the rule of the Western Chalukya kings Vikramáditya VI. (1073-1126) and his son Somoshvar IV. (1126-1138). In the latter part of the fourteenth century the third Bahmani king Mujáhid (1375-1378) domanded Bankápur fort from the Vijaynagar king Bukka (1350-1379), who refused to give it up.6 In 1406 the eighth Bahmani king Firoz Sháh (1397-1422) sent a party of troops to besiege Bankapur which is described as the most important fortress in the Karnatak. The fort fell, and in the treaty which followed, it was agreed that, to prevent disputes, the fort and its valuable dependencies should be ceded to the Bahmanis for ever.7 In 1413 Dov Ray, the fourth Vijaynagar king (1401-1451) sent an expedition to reduce Bankapur, but Alá-ud-din I. (1435-1457) sent Malik-ul-Tujár with the Daulatabad division to oppose him, and the Vijaynagar troops were forced to raise the siege. In 1472, at the instigation of the Vijaynagar king, the Hindu chief of Bankapur and Vikram Ray the chief of Bolgaum sent troops to retake the island of Gon, but the attempt failed. In 1512 the Vengapur, that is Bankapur, chief is noticed as sending an embassy to the great Portuguese general and statesman Dalboquerque (1508-1512) to congratulate him on his success at Goa. The ambassadors Chapter XIV. Places. Bankápur.

History.

¹ This is the Western Chálukya king Vikramáditya VI. As 1035 falls during the reign of his father Someshvar, Vikramáditya was probably at this time his father's viceroy in charge of the two districts mentioned in the inscription. Indian Antiquary, IV. 203; Fleet's Kánarese Dynastics, 87.

² Ind. Ant. IV. 203; Compare Fleet's Kánarese Dynastics, 45, 87.

³ Ind. Ant. XII. 217; Fleet's Kánarese Dynastics, 35.

⁴ This is probably the great sixty column temple of Rangasvámi. See above, p. 653.

⁵ Ileet's Kanarese Dynastics, 46.

⁶ Briggs' Ferishta, II. 330. Ferishta calls the Vijaynagar king Krishna Rdy. Unless Krishna Rdy is another name of Bukka, this cannot be right, as the great Krishna

Krishna Ray is another name of Bukka, this cannot be right, as the great Krishna Ray ruled from 1508 to 1512. Caldwell's Tinnevelly, 47.

Briggs' Ferishta, II. 385.
 Briggs' Ferishta, II. 432-433; Waring's Maráthás, 21.
 Briggs' Ferishta, II. 491.

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brought sixty beautifully trapped horses and asked that they might have 300 horses a year and the management of the land of Goa. Dalboquerque gave them the horses, because their chief was a useful ally as his land was a veritable and safe road to Vijaynagar, and as In 1573 Ali Adil Shah the his people were skilful saddlemakers.1 fifth Bijápur king (1557-1579) took Dhárwár and marched on Bankápur which was then the capital of Velapa Ráy formerly a servant of the Vijaynagar kings, but now independent. After vain appeals for help to Venketadri, the brother of his former master, Velapa Ray defended himself with such vigour that he nearly forced the Bijápur troops to raise the siege. The Musalmans were especially annoyed by night attacks from the Karnatak infantry, who, valuing their lives but little, entered the tents at night naked and covered with oil and stabbed the Musalman soldiers in their sleep. This unusual form of warfare caused a panic among the Musalmans and their sufferings were increased by the activity of the enemy in cutting off supplies. Mustapha Khán, the able Bijápur general, with the help of his Berji, apparently Badagi or northern that is Marátha-Telugu cavalry, reopened his lines of communication and, by placing a strong cordon of sentries round the camp, checked the night attacks. The siege was pressed, and, after a year and three months, the Musalmans were rewarded by the surrender of Bankapur. The king ordered a superb temple within the fort to be destroyed and himself laid the foundations of a mosque on the site of the temple. Many towns and districts were conferred upon Mustapha, and, till his assassination in Bankapur in 1579, the whole of the conquered country remained under his management.2 1673 Abdul Karim Kháp, the ancestor of the present Nawab of Sávanur was appointed governor of the province of Bankápur on behalf of Bijapur.3 In 1747 the Nawab of Savanur made a treaty with the Marathas and gave up the whole of the present subdivisions of Dhárwár, Navalgund, and Gadag, and parts of Ráncbennur and Kod, keeping Hubli Bankapur Hangal and other districts together with his family possession the fort of Bankapur. In 1755 Savanur was besieged by the French general Bussy, and so heavy a fire was opened on the town that to buy off the withdrawalof the Marátha troops the Nawab had to pledge Bankapur fort to Holkar.⁵ In 1776 Haidar took Bankapur and Savanur and returned to Maisur, leaving a chosen body of troops in Bankapur with directions to watch, and, as far as possible, prevent supplies

¹ Commentaries of Dalboquerque, III. 246, 247.

Brigge' Ferishta, III. 135-139; West's History, 11-12.
 Ormo's Historical Fragments, 276; Stokes' Belgaum, 42. The Bankapur sarkir. included sixteen subdivisions or parganás, of which Waring (Marathas, 246) gives a list taken from a Martiha statement prepared about 1790. The details are: Bajgal £3750, Banehalli £6876, Dhárwár or Nasratabad £12013, Gadmi £31,310, Haliyal £2458, Harihar £1036, Haveli or Bankápur £25,745, Karajgi £12,000, Kumdarur £4125, Kundgol £50,933, Lakehmeshvar £25,933, Másur £1500, Misrikota £9750, Naregal £56,577 Bajnabali £5950, and Bisila Hi £510, Misrikota £9750, Naregal £54,377, Rainabeli £8250 and Risihalli £13,190.

Stokes' Belgaum, 46; West's History, 22.

Stokes' Belgaum, 46; West's History, 23. The artillery practice during a factory of the state this siege so astonished the people that the year when one and a quarter lakhs of balls were fired against Savanur is still a local era. Bom. Gov. Sel. CXIII. 210.

passing to the Dharwar garrison which had not been reduced.\footnote{1} In 1780 Tipu (1783-1799) took Savanur and retired to Bankapur to celebrate the Muharram festival.2 According to a statement prepared from Marátha records of about 1790 Bankápur was the head-quarters of a sirkár of sixteen parganás with a yearly revenue of about £254,299 of which the Haveli or Bankapur sub-division had a revenue of £25,745 (Rs. 2,57,456).3 In 1792 Bankapur is montioned as a large town with a ruined fort to the west. Before it was dismantled by Tipu's army Bankapur fort was the chief fortification in the province of Savánur which lay five or six miles north-east and the two were together known as Sávanur-Bankápur. seemed to have been well built and strong. The ditch was deep and faced with stone and the curtains and bastions showed skill. Outside of the town to the south was a large reservoir and a handsome but neglected well.4 In 1802, in accordance with the terms of the treaty of Bassein, the Savanur country with twenty-six talukas and a yearly revenue of £102,284 and the Bankapur taluka with a revenue of £55,676 were coded to the British by the Peshwa. They were restored to him in 1803 in exchange for territory in Bundelkhand.

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Bannihatti, a small village about ten miles north of Kod, with, in 1881 a population of 309, has in a field an inscribed slab dated 1314.

BANNIHATTI.

Bardur, a small village twenty miles south-east of Gadag, with in 1881 a population of 659, has a temple of Bharateshvar with an inscription dated 1382.

BARDUR.

Belgal, a village seven miles north-east of Hangal, with in 1881 a population of 1387, has three inscriptions, one near the waste weir and two on the dam of a large pend.

BELGAL.

Belvantra, a small village three miles south of Kalghatgi, with in 1881 a population of 686, has two inscriptions one to the north between the village and a pond, and the other to the west.

Belvantra.

Belvatgi, a small village three miles north-east of Navalgund, lms a cuinous temple of Ramling and inscriptions.

BELVATGI.

Belvatti, a small village eight miles north-east of Hangal, with in 1881 a population of 285, is said to be the site of an old city called Lilávati. It has a large black stone temple of Gokuleshvar with carved walls and five inscriptions. Three other inscriptions occur in the village.

Benkankond, a small village about five miles south of Ránebennur, with in 1881 a population of 914, has a temple of Kalmeshvar with four inscriptions. Two of the inscriptions to the south of the temple are dated 1033 in the reign of the Western Chalukya Javasimha III. (1018-1042) and 1202 in the reign of the Hoysala BELVATEL.

BENKANKOND.

Wilks' South of India, II. 170; Grant Duff's Marathas, 400.
 Wilks' South of India, II. 555.
 Waring's Marathas, 246, See above p. 656 note 3.

Moor's Narrativo, 51.
 Aitchison's Treatics, V. 59 - 60; Grant Duff's Maráthás, 580.

Chapte

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Vir Ballal (1192-1211); the third on the lamp pillar is dated 1100: the fourth is on a hero-stone or virgal dated 1284 (S. 1206).

DISTRICTS.

Ple BANI Bi

Bhavihal, a small village about twelve miles north-west of Dhárwar, has a black stone temple of Siddheshvar with twenty-for square pillars and an inscription. The temple onjoys a grant of land.

BIDARKATTI.

Bidarkatti, about twelve miles west of Ranebennur, within 1881 a population of 193, has a temple of Sangameshvar with an inscription dated 1032.

BORYÁPUR.

Bokya pur, a small uninhabited village thirteen miles north-wet of Dharwar, has a temple of Virbhadradev built of black stone with an inscription.

Byádsl

Bya'dgi is a municipal town on the old Bankapur-Ranebennar road about ten miles north-west of Ranebennur, with in 1881 a population of 4117. A weekly market, one of the largest in the district, is held on Saturdays when rice, molasses, groceries, and chillies are sold in large quantities. Byádgi has a post office and The municipality was established in 1879. In a municipality. 1882-88 it had an income of about £482 (Rs. 4828) and an expendi-, ture of £383 (Rs. 3834). The income is chiefly from octroi, house, and other taxes. The municipality has done good work. From being a dirty town with streets full of holes and with filthy pits in all empty places, Byadgi has become clean and has a number of good roads. The water-supply is from six public cisterns or hauds and one well within the village, and several private wells in the village, and surrounding betel and cocoa palm gardens. Byádgi has two schools, a Government and a private school, and a temple of Rameshvar with two inscriptions, one in front dated 1092, the other to the left dated 1620. In 1847 Byádgi was described as the most important market town in Ranebennur with 250 looms.

BYAHATTI.

Bya hatti with in 1881 a population of 3084, is a large village on the Dharwar-Gadag road about eight miles north-east of Hubli. It has a temple of Virbhadradev of hewn stone said to be about 200 years old and another of Rámling with an inscription. There are two Lingáyat religious houses called Kambhalli Math and Charanti Math, each with an inscription. There is a fourth inscription nears well called Dhumakarva. The people of Byahatti have two copperplates one recording a grant by Singhana the last son of the Kalachuri Bijjala (1183), and the other by a minister of Kanharader (1247-1269) the seventh Devgiri Yadav. The Kalachuri grant consists of three plates (12" × 73") strung together by a heavy ring, the seal of which bears a figure of the bull Nandi with the sun and moon above it. The inscription, which is in the Sanskrit language and is written across the breadth of the plates, covers the inside of the first plate, both sides of the second plate, and the inner and part of the outer side of the third plate. The inscription mentions eight princes of the Kalachuri family, Krishna, Jogama, Paramardi, Vijjana or Bijjala, and Vijjana's four sons Soma, Sankama, Ahavamalla, and Singhhanadeva. The object of the inscription is to record the granti of Kukkanuru village in the Belavala (Belvola)

Three-hundred, to one thousand Brahmans by Singhanadeva, in the year 1184-85 (S. 1106 Shubhakrit samvatsara).1 The Devgiri Yadav plates record that in 1253-54 (S. 1175 Pramathi samvatsar) Kukkanuru, the chief town of a circle of thirty villages, was bestowed or rather re-bestowed upon one thousand and two Brahmans by Kanharadeva's minister Channdaraja.² In 1827 Byahatti had 600 houses, twelve shops, and some wells.3

Chabbi, with in 1881 a population of 1615, is a large village about eight miles south of Hubli. The old name of Chabbi is said to be Shobhanpur. In early times it was the capital of a Jain prince when it had seven Jain temples of which one is now left in the middle of the village. The earliest known mention of Chabbi is in a stone inscription dated 971 at Adargunchi four miles to the north which records a grant made by one Panchala who governed the Sebbi or Chabbi Thirty. The Vijaynagar kings (1348-1567) are said to have improved Chabbi. Krishna Raya (A.D. 1509-1529) is said to have lived in it and built a fort as at Hubli. Under Musalman rule it formed part of the territory of the Savanur Nawab and the Peshwas had an arsenal in it. A small but old temple of Mallikarjun stands near a pond, and, to the north-east of the village, is a plain temple of Nettagalla Basyanna. In the middle of the fort is an old well with an inscription. Another inscription occurs near a temple of Kálkádevi.

Chalmati, a small village about ten miles north-east of Kalghatgi, with in 1881 a population of 155, has a temple of Budangudd Basappa. About a mile and a quarter from the village is a much frequented den called Ajvankatti.

Chaudada'mpur, a village of 376 people, on the left bank of the Tungbhadra about fifteen miles north of Ranebennur, has temples of Mukteshvar, Ishvar, and Gopdovsvámi and eight inscriptions. Mukteshvar's is a black stone temple less graceful than the Dodda Basappa temple at Dambal, but a fine bold building of the same ago and style (1000-1100) with its detail more completely finished than in the Dambal temple.6 Mukteshvar's temple contains three inscribed stones, one dated 899 (S. 821 Siddharthi samvatsara), another dated in the reign of the Western Chalukya king Vikramaditya Tribhuvanamalla (A.D. 1076-1127), and a third with three inscriptions dated 1226, 1259, and 1262. Ishvar's temple on the bank of the Tungbhadra has an inscription of the great chieftain Vikramadityn of the lineage of Chandragupta. It is dated 1191, the solar eclipse on the no-moon of Kartik (December-January). Four other inscribed slabs occur, one bearing three Devgiri Yadav inscriptions dated 1242, 1263, and 1263, another behind the image of Vir Bhadra in the temple of Gopaldevmuni dated 1262, a third dated 1261, and a fourth dated 1291.

CHARRI.

CRAIMATI.

CHAUDAPIMPUR,

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Ind. Ant IV.271. Kukkanuru is the town of the same name in the Nizim's territory

about nine miles south of Yelburga and twenty miles north-cast of Mundarga.

Fleet, 73.

Clause I timerary, 72.

Ind. Ant. XII. 255.

See below, p. 660. As a design the chief defects of the Mukteshvar temple are the form of its dome, and the smallness of its crowning pot or kalash. Fergusson in Architecture of Dhárwár and Mysore, p. 67 photograph 39.

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Chapter Places.

BANI

Bi.

Chhapardhalli, a small village about ten miles south-east of Kod, with in 1881 a population of 179, has an old temple of Hanumán. Outside of the village to the north stands an inscribed slab.

CHIKANJI.

Chikanji, a village two and a half miles west of Húngal, with in 1881 a population of 218, has four inscriptions outside of a Smárt temple of Amritling. The temple has carved pillars and walls, and is said to be 500 years old.

CHIRKANARTI.

Chikkanarti, a small village about eleven miles south-east of Hubli, with in 1881 a population of 401, has a temple of Kalmeshvar with a stone inscription.

CHIKKERUR.

Chikkerur, with in 1881 a population of 1550, is a market town about ten miles west of Kod. A large weekly market is held on Wednesdays. Chillies and rice are the chief articles sold. Chikkerur has a large pond called Hirikere with two inscriptions dated 1094 and 1168, and temples of Banshankari, Hanumant, and Someshvar each with an inscription dated 1053, 1101, and 1101. It also has two hero-stones or virgals dated 1077 and 1222, and two other inscribed stones dated 1125 and 1129.

CHIN MULGUND.

Chin Mulgund, la large village of 1584 people about six miles north-west of Kod, has a black granite temple of Chikeshvar to the north-east of the village. The walls of the temple are carved with figures and the roof is supported on forty-four pillars. On a small hillock to the east of the village is a self-made ling of Siddheshvar. A little to the left of the ling is said to be an underground cave. Two inscriptions occur, one in eighteen lines of Old Kanarese characters to the left of the central door of the temple of Chikeshvar; the other dated 1243 is near a temple of Ishvar outside of the village.

Danbal,

Dambal, in north latitude 15° 12' and east longitude 75° 50', with in 1881 a population of 3770, is an old town on the Gadag-Mundargi road about thirteen miles south-east of Gadag. Till 1862, when it was removed to Mundargi, Dambal was the head-quarters of a petty division. Guavas and grapes are grown in large quantities at Dambal and sont to various parts of the district. Dambal has temples of Dodda Basappa, Kaleshvar, and Someshvar, all much injured. The temple of Dodda Basappa, outside the town to the north-east, is of a different style from any other temple either at Gadag or Lakkundi. The base both of the shrine and of the hall is star-shaped. As explained by Dr. Burgess, a star-shaped form is obtained by the overlapping of a number of equal squares over a common centre, with their corners all equi-distant from one another, in a circle whose radii are the semi-diameters of the squares. These projecting corners form the perimeter of the building. The interiors of both the shrine and hall are square. In the shrine, which as usual is dark, is a ling. In front of the shrine door is a large flat

¹ The village takes its name from the gold or chin dust which is found in the neighbouring hills. According to a tradition a hermitage of the sage Machhakandardys stood on the site of the village.

² Contributed by Dr. J. Burgess.

door step beautifully carved in low relief with rosettes, festoons. This is perhaps the most beautifully designed and small figures. door step in any temple in Western India. Above the entrance to the little antechamber, immediately in front of the shrine, is another piece of fine work, a sculptured architrave spanning the two slender pillars on either side of the entrance. It is one block about eight feet across and three to four feet deep. On each side, close above the pillars, is carved the conventional griffin-like monster, often called a makara or alligator, with an elaborate florid tail coiling over his back, and great square jaws from which issues an ornamental wreath or arch. Under the wreath was some figure or group of figures which have been broken. Four carefully finished pillars support the dome of the hall which has two entrances one on the south the other on the east. Outside of the east door, in continuation of the length of the building, a long porch or room of rough material has been built over a gigantic bull or nandi who sits facing the shrine. The outer face of the walls both of the shrine and of the hall are carried up from the star-shaped base in vertical projecting corners. The horizontal basement mouldings are very deeply cut, and, with their strong lights and shadows, surround the building by an effective series of light and dark bands. These are slightly broken by little ornaments on the faco of each angle. Along the top of the upper moulding of the basement are little groups of elephants and lions fighting or feeding. The facets of the walls, above this and up to the caves have long slender double pilasters with little tops or shikhars. Above each is a group of tiny figures dancing or playing instruments. Tho recesses between the corners have also pretty carving. Unlike most Chálukyan temples this has no cornice except round the porch which is in advance of the south doorway. The spire runs direct from the caves as a truncated cone. The step-like appearance disappears, the storeys dwindling into mere horizontal mouldings. The doorway on the south is very richly carved but has been covered with plaster and paint till the carvings are nearly hid. The two pillars in this porch are very minutely moulded in an abundance of perpendicular projecting and recessed angles. Close to the temple of Dodda Basayanna is a little templo of Dabgadi or Someshvavar. It is very plain, its most marked feature being a very deep flat straight-lined cornice which runs round over the caves of the hall or mandap. The temple includes an open hall or mandap, an antechamber, and a shrine. The antechamber is separated from the hall by a perforated stone screen through which is a doorway. bull or nandi lies in the antechamber and a ling is set in the shrine. Ontside of the town on the Gadag-Mundargi road is the Totad-

Outside of the town on the Gadag-Mundargi road is the Totadsvámi math or monastery a large modern building of black stone. Over the tomb of Totadsvámi the founder of the monastery is a well worked stone lotus. The pillars are hewn in imitation of the turned pillars of older times, and the door is carved with a pattern in very low relief. A door into a side cloister was brought about 1870 from Lakkundi about seven miles to the north. The Lakshmi on the door has been hown into a ling, but elephants remain. The present head of the Totadsvámi monastery is one Andavisvámi Places.

DAMBAL.

Temples.

Chapte Chapter XIV.

Fla

Bay: Places.

But Fort.

and under him are branch monasteries in most of the villages near Dambal, all endowed with lands.

To the west of Dambal is a ruined stone rubble fort with a Jain temple much out of repair. The fort is a large enclosure with walls in fair repair. The walls are high, and for the most part are built of large out stone blocks into which are built parts of pillars, door lintels, and side posts. In 1750, Troffeetbaker notices it as a stone fort surrounded by a ditch between which and the wall was a rampart of earth. In 1800 Colonel Wellesley described the fort as strong and well built with a dry and in some places deep ditch and walls about thirty feet high. committee of inspection described it as a square stone fort of some strength. It was surrounded by a dry ditch about ten fert deep and by a glacis or mised earthen mound which covered the works to a considerable height except on the south where a large pond exposed the ramparts. The ditch was well flanked by round towers projecting about twenty feet from the ramparts and situated about fifty feet apart. There were a few unserviceable guns. The committee found the works well built and wanting little repair. They recommended that a garrison of one or two companies of sepoys should be stationed in the fort with a hundred irregulars and a brace of twelve pounders.2 In 1842 Captain Burgoyne and Lieutenant Bell, who were appointed to examine the Bombay-Karnátak forts, described Dambal as a large stone fort about 100 yards west of the town. It was nearly round, being about 420 yards long by about 400 broad. The chief entrance was on the east by four gateways, one within the other, all covered and flanked by On the north and west were single gates, both strong works. There was a covered way with a parapet and a from within. blocked small glacis out of repair. The defences of the fort consisted of eleven unequal faces with angular bastions strongly built and fit for ordnance. The curtains were of the same material and were in good order. The ramparts were seven to fourteen feet wide and had three to four feet high parapets. The entire height of the works including the parapet varied from sixteen to thirty feet. The south face of the fort, where was a small berm eight feet round, was entirely destroyed. The counterscarp of the fort was revetted or faced with stone work generally in good order. Round the fort was a ditch about fifty feet wide and fifteen feet deep. Inside of the fort were a few inhabited houses and the court of the petty divisional officer. There was a palace and the ruins of a number of houses. The water-supply was from a large pond on the west, the dam of which ran obliquely north and south to within a hundred feet of the south-west corner of the fort. On the north large gardens came to within a short distance of the works. The committee found that, if the south parapets were put in order, from its general good condition and the strength of its masonry, the fort was strong enough to face heavy ordnance.3 By 1862 the fort had

Description, I. 501.
 MS. Report, pp. 38-39.
 Report dated Belgaum 5th July 1842.

fallen into ruin. To the west of the town is a pond covering 455 and watering 143 acres. Its dam was raised at a cost of £993 (Rs. 9930) by the Irrigation Department. It now holds 108,402,000 cubic feet of water and is largely used for watering the neighbouring Chapter XIV. Places. Dambat.

Inscriptions.

Of five inscriptions at Dambal the earliest and the most important is an excellently preserved inscription in forty-five lines dated 1095. on a stone-tablet to the left of the small Jain shrine in the fort. At the top of the stone are several emblems. In the centre is the figure of a woman, apparently the Buddhist goddess Tárá or Tárádevi who is mentioned in the inscription. She is scated in a shrino facing full front, and holds in her left hand an opening water-lily, and in her right hand some other objects. To her right are a cow and calf with the sun above them; and to her left is the standing figure of a man with his hands joined and held to his face in the act of salutation. In front of his hands is the flower of an eightleaved water-lily, behind him are two lamp-stands with burning flames, and above him is the moon. The body of the inscription which is in the Old Kanarese language, in finely engraved and well preserved characters of the end of the eleventh century, covers a space about 3' 1" high by 2' 1" broad. Round the top of the tablet are also two long lines of writing in the same character and containing three Sanskrit verses. The inscription begins with a salutation to Buddha and Tara. It records that on Sunday the fifth day of the bright half of Magh or February-March in the nineteenth year (1095) of the reign of the Western Chalukya king Tribhuvanamalla II. or Vikramáditya VI. (1076-1127), grants wero made to two Buddhist monasteries or viluirus at Dambal. One of the monasteries is mentioned as built in konour of Buddha by the sixteen settis or head merchants of Dambal, and the other as having been built in honour of the Buddhist goddess Tara by the merchant Samvágnyya of Lokkigundi the modern Lakkundi about eight miles north of Dambal. The head merchants who built and endowed the monasteries are said to be of the Vira Balanja sect,1 the class of merchants or traders who afterwards became the chief supporters of the Lingayat religion. The inscription mentions Lakshmadevi the chief queen as governing the district called the eighteen agraháras and the city of Dharmapura or Dharmavolal apparently Dambal.2 The second inscription at the temple of Dodda Basavanna is dated 1181 in the reign of the Western Chálukya king Someshvar IV. (1182-1189) with whom ended the supreme power of the Western Chalukyas. Of the three other inscriptions two are on pillars at the entrance of the temple of Kaleshvar, and the third is on a stone built into the wall of a well close by and nearly buried. The present desúi of Dambal has nine copperplates of the

¹ Other forms in inscriptions are Bilanju, Bananja, and Bananju. The modern form is Banajiga and Banajiga. There is still a division of the Banajigas called Jain Banajiga. Mr. J. P. Piect, C.S., C.I.E., in Ind. Ant X. 185.

² The cighteen agraharas appear to have been eighteen important towns scattered over the Belvola Three-hundred. Huli in Belgaum was one of them, Nargund another, and Dambal was perhaps a third. Fleet's Kanarese Dynastics, 48 note 3; Ind. Ant. XII. 47.

Chapte. Chapter XIV. Pla Places. BANK Danbal. His Inscribed Copper-plates.

third Vijayanagar king Harihar II. (1379-1401). The plates are about 72" broad by 104" long, and are strung on a massive ring, the seal of which bears the figure of a boar with the sun and moon above it. The plates are strung very irregularly though some of them are numbered. The inscription in Sanskrit characters and language is written across the breadth of the plates. It records how in the year 1379 (Shak 1301 Siddharthi samvatsar) Harihar II., while ruling at Vijaynagar, divided the district of Gadag consisting of sixty-six villages in the kingdom of Hastinavati into three equal shares. One was kept as the king's share, the second was bestowed for the religious rites of the gods Trikuteshyar and Virnáráyan, and

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the third was granted to minor village gods and to Brahmans.1 In the eleventh and twelfth centuries Dambal called Dharmanura or Dharmavolal, that is the city of religion, was under the Western Chálukyas. In 1095 it had two Buddhist monasteries to which grants were made by merchants who professed the Buddhist faith. About 1690 under Aurangzeb's governor of Sávanur Dambal was the head of a revenue division managed by an hereditary Hindu officer called the desái of Dambal. In 1778 Haidar Ali (1768-1783) took Dhárwár, Bádámi, and eventually the whole country south of the Krishna, but left Dambal, Nargund, Navalgund, and Sirhatti in the hands of their chiefs on their acknowledging his supremacy and agreeing to pay tribute.8 In April 1800 Dhundia Vágh the great Maratha freebooter laid siege to Dambal. During the course of the siege Appa Sáheb, the son of Parashurám Bhán, detached against him a force of 5000 cavalry and, a large body of infantry. Dhundia defeated the detachment and took possession of Dambal on the 5th of May. On the 20th of July Colonel Wellesley appeared before Dambal. He describes Dambal fort as strong and well built, the wall about thirty feet high, with a dry ditch, in some places of considerable depth. In the fort were about 1000 men who were summoned to surrender. An hour was given them to consider the offer. They declined to accept the summons and the place, which had held out against Dhundia for several weeks, was attacked and carried by escalade with the loss of a very few men wounded. The fort was surrounded by a body of cavalry under Colonel Stevenson and by the Maráthás under Gokhla. It was attacked in three places: at the gateway by Major Deese with the piquets supported by two companies of the second detachment of the Second Regiment; on one face by Lieutenant-Colonel Capper with the grenadiers and light infantry of the 73rd and the second company of the Second Regiment; and on the other face by Captain Macpherson with the granadiers and light infantry of the 77th and the remainder of the second detachment of the Second Bombay Regiment. It was impossible to force the gateway, and the party on that attack entered the fort by escalade; the other two attacks succeeded nearly at the same time.1 Almost the only loss to the

Journal Bombay Branch Royal Asiatic Society, XII. 338-339,
 Stokes' Belgaum, 44; West's History, 21.
 Wilks' South of India, II. 187. Stokes' Belgaum, 44; West's History, 21.
 Wilks' South of Ir
 Wellington's Supplementary Despatches, India (1797-1805), II. 73.

assailants was caused by the breaking of a ladder. The commandant of the fort, a Smart Brahman named Shrinivas Venkatadri Bahadur Desái was summarily hanged, apparently because he refused to give up the fort. During the Third Maratha War General Munro appeared before Dambal on the 7th of January 1818. After about four hours' firing from two batteries, on the morning of the 8th, the garrison amounting to 450 mon capitulated and engaged not to serve against the British during the war.2 In 1827 Captain Clunes notices Dambal as a usual halting place on the Dharwar-Belári road with 500 houses, twelve shops, and wells.3 In the 1858 mutinies the chiefs of Mundargi and Sirbatti attacked the Dambal treasury. But as on the previous day all the money had been sent to Gadag the insurgent chiefs gained but little.

Devar Hubli village, on the Dharwar-Haliyal road six miles south-west of Dhárwár, with in 1882 a population of 674, has a Jakhanáchárya temple of Shri Rangnáth.

Devgiri, with in 1881 a population of 2618, is a large village on the Bankapur-Ranebennur road about six miles west of Karaigi. Devgiri has an assistant collector's bungalow and temples of Hanuman, Basavanna, and Yellamma. Yellamma's temple is said to have been built by Jakhanacharya. It has an inscription dated Monday the bright half of Ashadh or June-July 1538 (S. 1460 Vilambi samvatsara). In 1875-76 three sets of copper-plates of three and four plates each were found in digging the bed of a pond at Devgiri. They are all early Kadamba grants, and, though not dated in any era, are placed by Mr. Fleet about the close of the fifth century after Christ. One of these grants is on three plates about 7".5 long by 1".8 broad. The ring joining the plates is 0"2 thick and is an oval 2".4 by 1".8. The seal also is oval 1".7 by 1".4. The device on the seal is a good deal worn. It is an animal standing towards the right with its head turned to the left, with the figure of a god or a man leaning against it or sitting on it. The first plate has four lines of writing on the inner side, the second has four lines on each side, and the third has four lines on the inner side. All are in Old Kanarese characters in the Sanskrit language. The plates record a grant of a field for the uso of a Jain temple by the heir apparent Devavarma, son of Krishnavarma, who is styled the great Kudamba king. The second grant is in three plates, about 2"5 long by 2"3 broad. The ring which joins the plates is about 0"3 thick and is almost a circle 2"3 in diameter. The seal is oval, 1"5 by 0".9; the device or writing cannot be read. The first plate has five lines on the inner side, the second five lines on either side, and the third five lines on the Chapter XIV.

Places. DAMBAL.

DEVAR HUBLL

DEVGIRI.

Inscribed Copper plates.

¹ Governor General to Sceret Committee of the Board of Directors, 31st August 1800; Wellington's Despatches, I. 69. General Wellesley seems to have afterwards regretted that the commandant was hanged without further inquiry. Before he left India Colonel Wellesley induced the Government of Bombay to allow the widow of the commandant to adopt a son and the son to hear the hereditary title of the family. The commandant's grandson joined the rebellion of 1858 and forfeited his life and estates. See above, p. 425.

2 Clunes' Itinerary, 72.

3 Clunes' Itinerary, 72.

4 Mr. F. 1a. Charles, C.S.

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Places.
Deveral.

inner side. The language is Sanskrit and the characters are Old Kanarese, small and neatly cut and mostly well preserved. The grant is issued from Vaijayanti or Banavási and records the gift of fields for the use of a Jain temple by Mrigeshvarma, the great king of the Kadambas, the son of Shri Shantivarma in the family of Kákustha, on the tenth lunar day in the dark fortnight of Kártik or November-December in the third year of the king's reign, The third grant is on four plates about 8" long by 2".5 broad. The ring on which the plates are strung is rather bent. It seems to have originally been circular about 2"5 in diameter and 0"2 The seal is eval 1"2 by 1". The device, which is very indistinct, seems to be a sitting or a kneeling figure of a god or man, probably of the Jain Jinendra. The first plate has four lines on the inner side, the second five each on either side, the third four on the inner and five on the outer side, and the fourth has five on the inner side. The language is Sanskrit, and the character is Old Kanarese, large bold and well preserved. The grant is issued from Vaijayanti that is Banavasi. It records the gift of a village to a Jain temple and two Jain sects by Mrigeshvarma the pious great king of the Kadambas on the full-moon day, the eighth fortnight of the rainy season, in the fourth year of his reign.1

DEVIROSUR.

Devihosur village, about ten miles south-west of Karajgi, with in 1881 a population of 1286, has temples of Báushaukari, Basvanna, and Bhogeshvar, the Báushaukari temple with four inscribed slabs, the Basvanna temple with one, and the Bhogeshvar temple with two of eleven and twenty lines. Four other inscriptions occur in the village, two in the yard of one Kajannivali, one in a field, and one on the dam of a pond to the east of the village.

DHÁRWÁR,

Dha'rwa'r, in north latitude 15° 27' and east longitude 75° 6', forty-eight miles south-east of Belgaum, 110 miles south-west of Bijápur, and about 300 miles south-east of Bombay, is the head-quarters of the Dhárwár sub-division and district. The 1881 census returns show that Dhárwár is the fifteenth city in the Bombay Presidency, with a town site of 735 acres and a population of about 27,000 or thirty-six to the square acre.

Asped.

Dhárwár stands 2580 feet above the sea, about seventy miles north-east of the coast town of Kárwár in North Kánára, forty-eight miles south-east of Belgaum, and twelve miles north-west of Hubli. To the north-east, east, and south-east the country round Dhárwár is open for upwards of thirty miles. On the west and south-west, within a mile of the town, are several small waving hills. From the north-east, east, and south-east, the town and fort hardly show until close at hand. From the south, the Collector's office, the temple of Ulvi Basappa, a few trees on the north-west, and Mailarling hill on the north first catch the eye, and on nearer approach, the upper parts of the German Mission Chapel, and the south of the town come into view. The approach from the west shows nothing until the

Ind. Ant. VII. 33-38; Jour. Bom. Br. Roy. As. Soc. XII. 300-325.

Contributed by Rao Babádur Tirmalrav Venkatesh.
 This includes 671 the population of Dhárwár Cantonment.

high ground is climbed on which are the Collector's office and Ulvi Basappa's temple. The crest of this high ground commands an excellent view. The Collector's office, which is probably the highest point for miles round, occupies a most prominent position and commands a view of the surroundings of the town and of the country near. Immediately below the office, is Ulvi Basappa's temple and beyond Ulvi's temple the Madarling hill slopes to the Bagh pond on the south of the town. The town itself, with its seven straggling villages, is half hidden by the rising ground above the Lal pond, and by the fort and station which are embosomed in trees.1 Beyond the town a wide and rich plain, about sixty miles long by thirty-six broad, stretches east and north-east to a low range of hills, among which, in the far distance, appear the hely hill of Yellamma and the hill fort of Paragad. Between April and mid-May the whole of this plain is one vast sheet of bare black soil, dotted with green village sites. During the rest of the year the plain is green with Indian millet cotton and wheat. To the north-east the country rolls thirty miles to the hill fort and town of Nargund. To the west the plain rises in low hills to the eastern end of a spur which stretches thirty-seven miles from the Sahyadris.

The rock on which Dhárwár is built belongs to the metamorphic series and is composed of layers of schist so twisted in places as to be almost vertical. This stone is unfit for building houses or drains, and house-building stone has to be brought from a distance. Its position on a slight rise gives Dhárwár excellent natural drainage. The storm-water discharges north into a water-course which runs north-east to the Govankop brook, about three miles north of Dhárwár. The surface drainage, from the quarter of the town which lies to the south-east of the hill, falls into the Bágh pond and the rice fields below it.

The station of Dhárwár may be divided into five parts the fort, the town, the civil station, the cantonment, and the suburbs. The fort covers about seventy-six acres, and has an outside diameter of about 800 yards. It has rumous mud fortifications, which were partially destroyed by Government after the 1857 mutinies. In 1826 Grant Duff described the fort as guarded by an outer and inner ditch twenty-five to thirty feet wide and nearly as many deep. The defences were of mud and were irregular and much decayed. When built in 1403 (Shak 1325 Subhánu samratsara) the fort had only one entrance from the east with four gateways one inside the other. In 1660 the gates were improved by order of the

Chapter XIV.
Places.
Dukrwkr.
Aspect.

Fort.

¹ T Dhár

villag

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together with six init and pirit of time survey numbers, and sixteen survey numbers belong to the uninhabited village of Saptapur; and sixteen survey numbers belonging to the uninhabited village of Bagatalao.

2 First Preface, Third Edition (1873), and p. 486.

DISTRICTS.

Chapter Places.

Bank Blie Dharwar.

Places.

Dharwar.

eighth Bijápur king Ali Adil Sháh (1656-1679). The four gateways remain, but are much out of repair. From the inside of the fort the first gateway, built in a line with the inner fort wall, is in fair order. It is 12½ feet high and 11½ feet broad. The arch above the gateway and the sides are built with cut granite and iron stone and mortar. Its wooden doors, three inches thick, still stand but cannot be shut. The inner ditch surrounds the inner fart wall. The second gate from inside, thirteen feet high and 15½ broad, is the largest in the fort and looks fresh and handsome. Its massive wooden doors are four inches thick, and have several beautifully carved wooden bars fastened to them by strong iron nails. The npper part and sides of the gateway are built with good cut granite stone cemented with mortar. On the top is an oblong slab with, in a large oblong space in the middle of the slab, the following writing in Persian:

When torn by sorrow and ill fortune, call on the famous and wonderful All. Through the favour of Ali and the might of Muhammad, you are sure to find instant relief.

At the right ends of the text are two small circles, the upper circle recording the date 11th Muharram of the year H. 1071 that is A.D. 1659, and the lower recording:

On Friday Ehldi Sittine-O-Allast 1071 (that is 1659).

At the left ends of the square are two similar circles the upper circle recording:

Abdul Gaffar Commandant of the fort of Dha'rwa'f-

And the lower circle recording :

Abdulla Captain of the fort of Dha'rwa'r.

The workmanship of this gateway is different from that of the fort wall, the gate being Muhammadan and the wall Hindu. This gateway is built in a line with the outer fort wall. Beyond are the third and the fourth gateways both of which are totally rained. The four gateways are so placed that an assailant attempting to enter has after forcing each gate to pass some distance to one side before reaching the next. The three inner gateways face east, and the fourth or the outermost gateway faces north. Before east, and third gateways, a little towards the east of the road, stands a thick slab of stone about five feet high and one and a half broad called the Field Pillar or Ran-Stambh. Prisoners condemned to death were formerly beheaded in front of this pillar. The practice has been continued till within the last few years, heads of sheep being offered instead of human heads.

The residences in the fort were formerly occupied by officers of the Native Infantry Regiment stationed at Dhárwár. Since 1875 when new lines were built they have been occupied by officers in the civil employ of Government. The water-supply of the fort is from a large reservoir or haud. Outside the fort is surrounded by a broad earthen mound or glacis.

The town occupies the ground to the east and south of the fort and includes the lowest part of Dharwar with its suburbs. The original town or petta attached to the fort was to the south-east outflanking the fort on the east. It was defended by a low mud

Chapter XIV.

Pla. Places.

BANK DHARWAR.

His Town.

east and west. The south-east division has ten lanes. It is inhabited by Bráhman priests and Government servants, the hereditary astrologers of Dhárwár, a large number of Lingáyat aud Marátha husbandmen, labourers, and Bedars, two or three goldsmiths, one or two Lingáyat priests, and a few Muhammadans. It has two Lingáyat monasteries, and three Hindu temples of Ráyar Hanumán, Gopálkrishna, and Mahádev.

The north-eastern division has eleven lanes.² It is inhabited by Pendháris, Musalmán labourers, betel leaf sellers and gardeners, Lingáyat grain merchants, retail shopkeepers and husbandmen, goldsmiths, weavers, and shoemakers, and two Vadars. In this subdivision is the chief native liquor factory, a few Bráhman priesta and Government servants, a Lingáyat and a Vellál mason, a few blacksmiths, rope-makers, and dealers in skin, and three temples of Ishvar Hanumán and Kalva, and a goldsmiths' and three Lingáyat religious houses.

The north middle division has seven lanes. It is inhabited by several Bráhman priests, Government servants, the desái of Dhárwár, several rich Bráhman Lingáyat and Muhammadan merchants, Komti merchants, Jingars, retail shopkeepers and grain merchants and their shops, a few oil pressers, some copper and brass vessel sellers, and a few Lingáyat priests. In this division are the mámlatdár's office, Government Maráthi and Kánarese schools, the old market, the chief police station, two Lingáyat monasteries, Hindu temples of Vithoba, Venkoba, Mudi-Hanumán and Ishvar, Rághavendra Swámi's shrine, a Lingáyat temple of Basvanna, Nálband's mosque, and a few lime kilns.

The south middle division has ten lanes. It is inhabited by Mádhva Bráhman priests, Government servants and pleaders, Marátha Lingáyat and Jain husbandmen and labourers, a few Musalmáns and cotton cleaners, goldsmiths, earthen-pot makers, Lingáyat merchants weavers and priests, three or four retail shops, and dancing girls. The chief objects of interest in this division are three Bráhmanic temples of Kalmeshvar, Hanumán, and Ishvar, a Jain temple, a Lingáyat temple of Virbhadra, two Lingáyat monasteries, and a mosque.

The south-western division has seven lanes.⁵ The chief inhabitants are Lingayat merchants priests and husbandmen, Brahman

¹ Beginning from the Navlor gate, the names of the lanes are two Bedar lanes, Kolikera, Udpiraya-galli, Marátha-galli, Kalli-voni, Attikole-voni, Shudra Joshi's vadha, Korvars' or musicians' galli, and Gondhi's galli.

² Muchandya-galli, Gavachari-galli, Madansetti-galli, Adki-galli, Bhus-galli, Gunari-galli, Mensinkai-galli, Viraktmath-voni, Ghall-voni, Motchigerri, and Kambar-galli or blacksmith's lane.

Mudihanumán-galli, Dattobrao's galli, Táluk Kacheri-galli, Hirematb lanc, Desai-galli, Javali or cloth-seller's bázár, Vibhuti-galli, Naudikole-galli, Zingar-galli, and Rajput-galli.

Rajput-galli, Kumbar-galli, Lukmanhalli, Basti-galli, Deshpandi-galli, Hembli-galli, Mondgalli and Hosvoni.

⁵Kodanpur-galli, Weavere' lane, Dundi-galli, Velligar-galli, Hanuman-galli, Kasba Dyamaya-galli, and Mollia-galli.

priests, merchants, Government servants and pleaders, weavers, a blacksmith and soveral goldsmiths, carpenters, a few Muhammadan washermen, dancing girls, and a few indigo dyers. The chief objects of interest are four Lingáyat monasteries, a temple of Chauri-Basappa, two Bráhmanical temples of Bánshankari and Venkoba, and a mosque.

The north-western division has ten lanes.¹ The chief inhabitants are Muhammadan merchants husbandmen and labourers, Government messengers, tinmen, coppersmiths, traders, water-carriers, grass-cutters, washermen, barbers, cow-keepers, a few Brúhman priests, Government servants and pleaders, indigo-dyers, a few Marútha and Lingáyat husbandmen, and labourers, goldsmiths, dancing girls, carpenters, earthon-pot makers, and Lingáyat priests. The chief objects of interest are Brúhmanical temples of Dattátrnya, Narsinh and Hanumán, a Lingáyat monastery, the Jáma and four or fivo minor mosques, the Porsian school-house, and the German Mission school-house, on the bank of the Halkeri Pond.

The suburbs fall under five divisions. To the north of the main east and west street, and to the east of the Hirekeri or Moti pond, are nine lanes.2 This part is peopled by Muhammadan and Maratha husbandmen, labourers, Government messengers, constables, and some Hindustán Bráhmans. There are three temples of Báláji Hanuman and Ganesh, and three mosques. To the north of this nine-lane sub-division is the European Protestant burying ground, and north of this burying ground is the European cricket ground. Boyond the cricket ground to the east is Haveripeth, extreme north-cast about a mile distant is the new village of Madihall. It is bounded on the north, east, and south by Dharwar lands and open country, and on the west by Haveripeth. In 1832, under the patronage of Mr. Josiah Nisbet the Principal Collector, Judge and Sessions Judge, and Political Agent in the Southern Maratha Country, Brahman public officers and agents of landholders built the new village of Madihall towards the east of Haveripeth. For some time it was called Nisbetpur after Mr. Nisbet but it is now called Madihalla, from the neighbouring brook or halla on the banks of which the long and strong grass called madi, used in making ropes and sweeping brooms, is grown. Madihalla includes two long streets running parallel to each other east and west. There are no cross lanes. All the houses here are built of sun-dried bricks, and covered with tiles. The higher public servants and agents of landholders and sardars built several good houses on both sides of the southern street. Many are now in ruins, and the few that remain are occupied by Brahman priests and poor public sorvants. In the northern street live several Maratha husbandmen messengers and constables. At the end of the village is a large temple of Narsinh which was built by the late Ráo Bahádur Shrimvásráo Chapter XIV.

Places.

Dhárwár. Town.

Suburbs.

Madikall.

Pendhári-galli, Tadkodo-galli, Gavli-galli, Langoti-galli, Kumbhár-galli, Darogagalli, two Rassálpur-galli, Sodágar-galli, and Batr-galli.
 Mutgar Inno, Haddukhán's lano, Bára Imám lane, Bhovi Mandi lane, Mankalváda, Mochi-galli, Kodi lane, Kirpárám lane, and Marátha lano.

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Háveripeth.

Sangit, diwán to the Principal Collector and Political Agent in 1832, in front of his house where his family now lives. There are four or five houses of Muhammadans. The population is entirely dependent on the Dhárwár market. The well water is sweet and close to the surface.

About three-quarters of a mile north of the town is the modern village of Haveripeth. It is bounded on the north by the lands of Dharwar and Madihall, on the south by the open ground between Háveripeth and Dhárwár, and on the west by the open ground between Haveripeth and Narayanpur. Under Bijapur (1489-1686) and afterwards under Aurangzeb (1658-1707), Dhárwár fort was in charge of a commandant, who had a small territory assigned to him for the maintenance of the garrison. The town or petta was placed under the manager or sarsubhedar of the district. The same form of government was continued under Peshwa Báláji after he took the fort in 1753. The merchants lived in the petta and the markets were there. Owing to continual dissensions between the commundant and the civil authorities in the town, the garrison were not allowed access to the petta and had much difficulty in getting provisions. The commandant represented the matter to the Peshwa, who ordered a new petta or market to be built for the use of the garrison. It was built towards the north-east of the fort in 1753, and was called Sadáshiv peth, in honor of the Peshwa's cousin Sadáshivráv, who had obtained the order for its building. As the market days in the Mangalvár and Shukravár street in the town of Dharwar were Tucsdays and Fridays the new market was ordered to be held on Sundays. It was therefore also called Aditvár peth or the Sunday street. When and why the old names were changed into the present Haverineth is not known. In Haveripeth two long streets, one north and south, and the other east and west, cross each other almost at right angles. The chief inhabitants are Lingayat merchants and oil-pressers, Pendháris, cotton-cleaners. carpenters, and blacksmiths. Some rich Muhammadans, several Lingáyat and Marátha husbandmen and labourers, and Lingáyat priests and Musalman beggars also live in this division. chief objects of interest are four Brahmanical temples of Hanuman, Ishvar, Kareva, and Dyámava, a Lingáyat temple of Basvanna, two Lingayat monasteries, and three mosques. Outside the northern entrance of Haveripeth are the Purmankatti pond and a rest-house.

^tulganjikop.

About a mile and a half to the north of the town is a group of five hamlets Gulganjikop, Kamlápur, Hosmálápur, Málápur, and Náráyanpur, all near one other and forming one large village. Gulganjikop lies to the east, Málápur and Kamlápur to the north, Hosmálápur to the west, and Náráyanpur to the south. The boundaries of this group are on the north tho lands of Gulganjikop and Málápur, on the east the lands of Málápur between this group and Háveripeth, on the south the open space between this group and the fort, and on the west the lands of Gulganjikop and the jail. The whole group is more like a separate

village than a portion of the city. The streets are more like lanes than roads, being neither paved nor metalled. Except about ten with tiles the houses are small and flat roofed. They are chiefly peopled by Lingáyat and Marátha husbandmen and labourers. There are ten or twelve houses of carpenters and as many more of blacksmiths and earthen-pot makers. There are four or five retail, but there is no large wholesale shop. Four rich merchants three Lingáyat and one Rajput, several Musalmán and Marátha Government messengers and constables, eight or ten families of Musalmán beggars, and about ten families of Lingáyat priests live in these villages. The headman of Málápur is a Musalmán, and the headmen of the other villages are Lingáyats. The accountants of these villages are Bráhmans who live in the town. The only objects of interest in the group are two temples of Hanumán, a Lingáyat temple of Basvanna, two Lingáyat monasteries, and two mosques. A little trade in cotton is carried on in these villages.

To the south-west of the Gulganjikop group is Saidapur village. It is bounded on the north by the open ground south of Gulganjikop, on the east by the fort, on the west by the ground behind the jail, and on the south by the Dhárwár-Belgaum road. It is peopled by poor Musalmán, Marátha, and Lingáyat husbandmen and labourers. There are some tiled and several small flat-roofed houses, but no merchants or Brahmans live here. The village has a Roman Catholic chapel, with a few resident Catholic Christians. To the south-east and west of Saidapur is the civil station and the Between the south-east of the Collector's garden and the west of the town, almost in a line with the middle Kamánkatta street, is a small nameless village. It is bounded on the north by the road from the town to the Collector's office, on the east by the north and south main road from Hubli to Belgaum and the west of Dharwar, on the south by the Kempgeri pond, and on the west by the Collector's garden. About 1824, the private servants and messengers of the Principal Collector, and the military officers of the regiments then stationed in the fort, built several small huts and houses at this place. Several Musalman labourers, and Government servants of the messenger and constable class, several Bhois formerly palanquin-bearers but now fishermen, some Roman Catholic Christians, clerks in Government offices, and some Hindustáni Bráhmans live here. About 1833 the jailor dug a public well with the help of a few convicts, and his family enjoy a piece of rent-free land for its repair. To the south-west of the town is a village originally called Baberpur after Mr. T. H. Baber the Principal Collector who built it. It does not now retain that name. The boundaries of this village are on the north the southern slope of the Madarmardi hill, on the east the south-west of the town, on the south the Hirekeri pond, and on the west the open country towards the main Belgaum-Hubli road. The great south-east and west road of the town passes through this village towards the west to

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the Collector's office, District Judge's, and First Class Subordinate Judge's courts, Ulvi Basappa's temple, the European part of the town, and the main road from Belgaum to Hubli. On the south side of this street are Ráo Bahádur Tirmalráv Inámdár's dwelling, Satva Bodh's Hanuman's temple, and four or five houses of Bráhman priests and others. On the northern side are Venkatráv Bahádur's large well, Tirmalráv's rest-house, and houses of three or four Brahman Government servants and others. The smaller lanes in this new village are one called the Chávni, and three Berad lanes. The Chavni was originally occupied by the savars or horsemen of the Political escort. It was next occupied by police constables until when they were removed to the new police quarters. labourers and others now live there. The three Bedar lanes are so called from about a hundred Bedars and some Hulsars who live there. The Bedars hire themselves for daily labour or sell firewood. Some trade in mango and guava fruit in their season. There is a small Hanumán's temple in the Chávni lane occupied by a Bairági ministrant. To the north of the new village and towards the west of the town are several small and irregular lanes of Holerus or Mhars, Talvarus or village constables, Kurbarus or shepherds, weavers, basket-makers, and Kasberus or prostitutes. There is an Akhani lane, where live Muhammadan sellers of beads and needles and some workers in silk, Gaulis' or cowherds' lane, the two market lanes of the old regimental lines where live two or three Muhammadan cloth merchants, Kákar lane where live some Pendhári fishers, firewood sellers and pony hirers who give ponies on hire and bny and sell fish, Madrási lane and Korvarus' or low musicians' lane where live Native Christians from Madras most of them employed as servants in European households. Most of the people of this locality are poor and live chiefly on labour or service and some by begging. Most of the houses in these lanes are small clumsy and dirty and the lanes themselves are not clean. Of religious buildings the Holerus have three temples of Durgava the goddess of cholera and her sister Mátáji, the Muhammadans have one or two mosques, and the Roman Catholics have a chapel and a burying ground. To the north of the lanes in the west of the town are the new police lines down the north slope of the rising ground towards the southwest of the fort. The police force consists of Muhammadans, Maráthas, a few Rajputs, and a very few Bráhmans. Close to the lanes are a small temple of Murgamma and a mosque. Beyond the Police lines are the civil station on the north and west, and the fort on the east. Outside to the south-east of the town are two Lingáyat monasteries called Churmuri and Chilal, several houses of Bedars and Lingáyats, Ráo Bahádur Venkatráv Principal Sadar Amin's cenotaph, a public sweet water round well known as Kopramma's Well and a rest-house both built by Ráo Bahádur Tirmalrao Inamdar the former in memory of his mother.

Population. The 1872 census returns showed a population of 27,136, Hindus

19,836, Musalmáns 6797, Christians 498, and ten Others. The 1881 census returns showed a population of 27,191, including 671 in the cantonment, of whom 19,709 were Hindus, 271 Jains, 6545 Musalmans, 618 Christians, twenty-four Parsis, and twenty-four Others. Excluding the 671 in the cantonment, the remaining 26,520 give an average density of thirty-six to the square acre over 735 acres the whole area of Dharwar town. As regards condition the people of Dhárwár town may be arranged under four classes. the rich with yearly incomes of more than £100 (Rs. 1000), the upper middle with £100 to £50 (Rs. 1000-500), the lower middle with £50 to £20 (Rs. 500-200), and the poor with less than £20 (Rs. 200). Of the rich there are 125 to 150 families. They are chiefly priests, Government servants, lawyers, lendlords, pensioners, traders, moneylenders, liquor and toll contractors, and copper or brass smiths. Of the upper middle class there are 200 to 400 houses belonging to almost the same classes as the rich. Of the lower middle class there are 500 to 1000 families, belonging almost to the same classes, with the addition of some oilmen and tailors. Of the poor there are 2000 to 2500 families, chiefly retail dealers and craftsmen, excepting copper and brass smiths; a few oilmen and tailors, husbandmen, labourers, wanderers, and beggars.

Except Government servants, whose office hours last from ten to five, men of all classes work from seven to twelve, dine and rest for two hours, work from two to six, sup about eight or nine, and retire to rest about ten. Among the rich the women rise about six, clean the gods' room, light lamps before the house gods, help to make ready the midday meal, dine after their husbands, rest till two, go to the temple to worship or hear sacred books or sew or embroider at home, help in making supper, and retire to rest about ten. In many families, servants clean the hearth, bring water and cook, while the women supply them with provisions for cooking, feed anoint and dress their children and do other light work. Except that they rise before six and bring water and cook, middle class women pass the day like the rich. Poor women, except among Brahmans and other high classes, rise about four and grind grain till daylight. After a light breakfast, they work till about twelve, dine, and rest. After two they work till six, make supper ready, and, after supping, go to bed about nine. A husbandman's wife takes his breakfast to the field about nine, goes home, and makes dinner ready about twelve. In the afternoon, she does house work and in the evening makes supper ready and sups. In busy times, the men carry their breakfast with them to the fields at about six in the morning. The wife takes her husband his dinner at twelve, and after two hours' rest, works with him in the fields till evening. She bathes at home on Mondays and Thursdays, anoints herself with oil and warm water once in a fortnight, and goes to the temple on every Monday, and on Makarsankránti that is January 12th, Maháshivrátri in February, Diváli in October or November, and the first Kártik

Ekadashi or eleventh in November.

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Population.

Daily Life.

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The rich generally live in their own houses, which, if let, might command a yearly rent of £3 to £10 (Rs. 30 - 100). They have one or two servants to cook and bring water, each at a yearly cost of £10 to £15 (Rs.100-150) and their dinner, and one or two buffaloes and a cow, whose milk curds butter and buttermilk are used by the family. Buttermilk is sometimes distributed in charity. Few keep either a horse or a bullock carriage or a pony cart. The yearly cost of food for a family of five, a man a woman, two children, and an aged member of the family, varies from £25 to £50 (Rs. 250 - 500), and the cost of clothes from £10 to £20 (Rs. 100 -200). A son's marriage costs £80 to £200 (Rs. 800 - 2000), and a daughter's, because no ornaments are given, £60 to £120 (Rs. 600-Rs. 1200). The dowry given to the bridegroom is not included in the latter sum. A death costs £15 to £30 (Rs. 150 - 500); and a birth £5 to £15 (Rs. 50 - 150).3 Upper middle class families live in houses with a yearly rent of £3 to £5 (Rs. 30 - 50); servants cost them about £3 to £6 (Rs. 30 - 60) a year besides dinner. They keep a cow or a buffalo, whose milk is used by the family. Most of them if Bráhmans, Maráthás, Jains, or Musalmáns, keep a small pony and if Lingáyats, a bullock to ride on, food costs £20 to £40 (Rs. 200-400), clothes £6 to £12 (Rs. 60-120); a son's marriage £40 to £100 (Rs. 400-1000), and a daughter's, exclusive of the dowry paid to the bridegroom, £30 to £50 (Rs. 300 - 500); a death about £12 to £20 (Rs. 120 - 200); and a birth £4 to £12 (Rs. 40 -120).4 Lower middle class families live in houses with a

¹ The average wage details are: Cook £10 (Rs. 100) and dinner, water-bearer the same, house servant £6 to £10 (Rs. 60-100), stable servant £7 8s. (Rs. 74), barber and washerman £2 (Rs. 20), and family priest £5 (Rs. 50), and dinner and clothes. If the priest's wife lives with the family her cost will be £2 8s. (Rs. 24), and dinner and clothes.

² The clothing details are: The woman two robes or sadis Rs. 12 each, four bodices Rs. 1½ each, one pitambar or silk robe Rs. 125 and one paithani or silk and cotton robe Rs. 120 lasting five years. The man a lace-bordered rumdl or handkerchief Rs. 40 lasting six years, a coat or angarkha of broadcloth Rs. 20 or Rs. 30, and twelve cotton coats Re. 1 each, two pairs of waistcloths Rs. 10-15 a pair, and a pair of shoes Rs. 2 each. A child's clothes cost Rs. 10-15.

³The ceremonial expenses are: Marriage for a boy, ornaments to the bride Rs. 2000, clothes Rs. 500, food Rs. 1000, charity Rs. 200, fireworks Rs. 75, musicians Rs. 50, yelliadaki or betel leaves and nuts and dancing girls Rs. 100 and dinner, labour Rs. 75, miscellaneous Rs. 500, and in the case of a girl a dowry of Rs. 1500 to the bridegroum, total Rs. 6000. Death, wood Rs. 7, priest ils. 75, money gifts to begging Brahmans and dashuddn or ten gifts Rs. 100, and aninkharch or dinner to Brahmans Rs. 100, total Rs. 282. Birth, confinement charges Rs. 30, gifts to Brahmans Rs. 25, sweetmeats Rs. 15, betel leaves and musicians Rs. 10, clothes for the mother and babe Rs. 50, total Rs. 130. The charges for a girl are Ils. 25 to Rs. 30 more than for a boy.

⁴ The total details are: Cook Rs. 72, house servant Rs. 60, stable servant Rs. 60, and barber and washerman Rs. 15, household priest Rs. 36, mutaidi or priestess Rs. 12. Clothes, the woman two robes at Rs. Seach and four bodices at Re. I each, pitámbar Rs. 100, good robe Rs. 30 or Rs. 40; the man two pairs of waist-loths Rs. Seach, lace headscarf Rs. 25, coat of bandt Rs. 15-20, eight dayis or small coats Re. I each, and a pair of shoes Rs. 14 each; the boy's and the girl's clothes cost Rs. 8 each. Marriage, a son's marriage, ornaments Rs. 800, clothes Rs. 300, food Rs. 500, charity Rs. 75, fireworks Rs. 30, yelliadaki and dancing girls Rs. 75 and dinner, labour Rs. 50, miscellaneous Rs. 300, and dowry to bridegroom in the case of girls Rs. 1000. The expense of a daughter's marriage is the same except that there are no ornaments. Death, wood Rs. 7, priest Rs. 50, beggars Rs. 75, padaddn Rs. 10, annalharch Rs. 75, miscellaneous Rs. 50. Birth, confinement charges Rs. 25, Bráhman beggars Rs. 20, sweetmeats Rs. 15, yelliadaki Rs. 10, clothes Rs. 30.

yearly rent of £2 10s. to £3 (Rs. 25-30); their servants cost them about £2 (Rs. 20) and dinner, and the barber and washerman cost them 12s. (Rs. 6). They keep a cow or a buffalo about half of the produce of which is used in the house and the rest they sell; their food costs them £18 to £30 (Rs. 180-300), their clothes £4 to £8 (Rs. 40 - 80), a son's marraige £30 to £60 (Rs. 300 - 600) and a daughter's, exclusive of the dowry paid to the bridegroom, £20 to £40 (Rs. 200 - 400); a death £8 to £10 (Rs. 80 - 100); and a birth £3 to £6 (Rs.30-60). The poor live in houses with a yearly rent of 12s. (Rs. 6), the barbers and the washermen costing them 6s. (Rs. 8) a year. They keep a cow or a buffalo about one-fourth of whose produce is used in the house and the rest is sold; food costs them £10 to £15 (Rs.100-150); clothes £2 to £3 (Rs.20-30); a son's marriage costs £4 to £8 (Rs. 40-80) in addition to the dowry or terunu; a daughter's marriage costs £5 to £10 (Rs. 50-100); a death £3 to £5 (Rs.30-50); and a birth £1 to £1 10s. (Rs. 10-15).2

The following is a short summary of the present strength and condition of the different classes of townsmen:

Priests, of whom there are about 400 families, are found in all parts of the city. They are of two main classes Hindus and Musalmans. There are about seven-sixteenths of Brahman priests of sects, one-sixteenth of goldsmiths carpenters and blacksmiths. four-sixteenths of Lingáyats, and four-sixteenths of Musalmans. As it is not a holy place like Násik or Pandharpur, Dhárwár has no Brahman priests with hereditary supporters or yajmans. Several priests are attached to families as family priests, and officiate at all their religious ceromonics. Some hold inams or rent-free lands, others are temple priests and beggars. Very few of the priests are well off and able to save and occasionally to lend money. Their wives do nothing but house work. Many send their boys to school, teaching them Kanarese, Marathi, Sanskrit, and English, and striving to get them into Government service. They live chiefly Chapter XIV. Places. DHÁRWÁR. Living.

Priests.

¹ The total details are: House servant Rs 48, barbor and washerman Rs. 8. Clothes, the woman two robes at Rs. 6 cach, four bodices at 12 annas each, two good 10bes Rs. 20; the man a two or four year simple headscarf Rs. 10, two pours of waistcloths each at Rs. 3, four angles at 12 annas each, one coat at Rs. 5, and one pair of shoes 12 annas; the children cost Rs. 6 each. Marriage for a boy, ornaments Rs. 400, clothes for Both boy and girl Rs. 100, food Rs. 100, chanty Rs. 50, involves and oil Rs. 10, music Rs. 15, yelliadali and dancing girls Rs. 25 and dinner, labour Rs. 25, muscellaneous Rs. 100, and dowry to bridegroom in the case of guls Rs. 150. Death, wood Rs. 7, priest Rs. 25, gifts Rs. 40, padadan Rs. 10, annakharch Rs. 50. Birth, confinement Rs. 20, ceremonies Rs. 10, charity Rs. 5, sweetmeats and musicians Rs. 8, feast on twelfth day Rs. 8, clothes for mother and babe Rs. 15, total Rs. 66. The charges on account of the last three items are greater on the birth of a son than on the birth of a son than on the birth 1 The total details are : House servant Rs 48, barber and washerman Rs. 8, Clothes,

account of the last three Rems are greater on the birth of a son than on the birth of a daughter.

The total details are: Barber and washerman Rs. 4. Clothes, the woman two robes at Rs. 3 each and one bedies at annes 2, good robes Rs. 10; the man a simple headscarf Rs. 5, two pairs of waistcloths at Rs. 2 a pair, two dispit at 12 annes each, and a 12 annes pur of sandals, the boy and girl together cost Rs. 1. Marringo for a son, ornaments Rs. 100, clother for both boy and girl Rs. 25, food music Rs. 5, labour Rs. 5, miscellaneous Rs. 5, and dowry to the case of girls Rs. 100. Death, wood

Rs. 10, in food Rs. 25. Birth,

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in the north, south-cast, and middle parts of the town, and in the Madihall village. Goldsmiths, blacksmiths, and other craftsmen support their own priests. Some Lingayat priests hold inam or rent-free lands and others are beggars. Of Musalman religious officers, some are Kazis or marriage registrars, Mullas or priests, Khatibs or scripture readers and mosque servants, who hold rent-free lands. The rest live by begging.

Lawyers.

Lawyers or Vakils, of whom there are about fourteen houses, chiefly in the town, are Mádhva, Smárt, Konkanasth, and Sárasvat or Shenvi Bráhmans. Some of them are rich and save. The rest are just able to make a living. Their wives do house work generally with the help of servants. Their boys go to school and learn Maráthi Kánarese or English. Few of them have risen to high places in Government service.

Government Servants. Government servants numbering about 1000 houses live in all parts of the town. They are Brahmans of different classes, Maráthás, Lingúyats, Musalmáns, Pársis, and Christians. Of the Bráhmans and Maráthás some hold high places in the revenue judicial police and educational branches of the service, others are clerks and a few especially Maráthás are messengers and constables. A few Lingáyats hold high places in the revenue department and the rost are clerks. The Musalmáns are messengers and constables. Three or four of them are clerks, and a few hold higher posts. Of the Pársis and Christians a few hold high positions and the rest are clerks. Of Government servants those in high positions are alone able to save. Their wives do nothing but house work, and all but a few messengers and constables send their boys to schools.

Practitioners.

Besides the Civil Surgeon and hospital assistants, there are about eight practitioners, four of them Brahmans, one a goldsmith, and one a Marátha, known as vaidyas, one a Musalmán hakim, and one is a Pársi who is a licentiate of medicine and surgery of the Bombay University. The vaidyas live in the Hindu quarter of the city, the hakins in the Musalman quarter, and the Parsi in the European station. There are also two female medical practitioners one a Marátha and the other a Telinga woman. They belong to the prostitute class and live in the Hindu quarter of the city. Except the Parsi none of these practitioners perform surgical operations. They are called in cases of sickness and are generally paid 2s. to £5 (Rs. 1-50) including all presents, besides the price of the medicine. They neither save nor lend money; but are fairly off, free from debt, and live in rented houses. The wives of the male practitioners do nothing but house work and their boys go to school. Besides these regular doctors, three or four barbers bleed and set dislocated bones, three or four Marátha and Lingáyat women act as midwives, and about four wandering Vaidus prescribe pills or mátrás.

Men of Means,

Of men of means, there are about one hundred and twenty-five landlords, including Desáis, Deslipándes, Inámdárs, and Government pensioners. Of the landlords some are Bráhmans, and some Lingáyats who live in the Hindu quarter of the city, and the

rest Musalmans who live in the Musalman part of the town. Partly from the number of dependants and partly from the large sums they are obliged to spend on marriages and other ceremonies, men of this class are badly off. Some of them are in debt. They send their boys to school and some of them have risen to high posts in Government service. The Government pensioners are Brahmans, Marathas, Musalmans, Lingayats, and Christians. They educate their children chiefly for Government service and as pleaders.

Of moneylenders there are four Brahmans of all subdivisions, a Komti, a Musalmán, and a Lingáyat. All are settledin Dhárwár. They are sober, fairly thrifty and hardworking, and well-to-do, some of them with capitals of £500 to £800 (Rs. 5000-8000), and one with nearly £5000 (Rs. 50,000). No Dhárwár moneylender is worth more than £5000 (Rs. 50,000). They live in their own houses worth a yearly rent of £4 to £8 (Rs. 40-80). Their women do nothing but house work and are helped by servants, and their boys go to school from seven to fifteen learning Kanarese, Maráthi, and a few English. They lend money to traders, husbandmen, and brass-workers, chiefly for trade purposes; but sometimes to meet marriage and other special private expenses. Advances are made sometimes on the security of land houses and ornaments, and sometimes on personal security. Their rates of interest vary from nine per cent when gold and silver ornaments are pleged, to twenty-four per cent on personal or landed Either bonds, or signature in the day books, with a 6d. (4 as.) stamp affixed, are always taken. Two books are kept, a day book called rojnáma or kirdi and a ledger or kháta. Though they often take their debtors into the civil courts, the moneylenders bear a good name for patience and fair dealing. Marvadi moneylenders number four to six houses, chiefly in the town of Dharwar. They are most hardworking sober and thrifty, but very harsh and grasping. They are well off, some of them with capitals of £200 to £400 (Rs. 2000 - 4000), living in rented houses worth a yearly rent of £1 16s. to £2 8s. (Rs. 18 - 24). Their women do nothing but house work. Their boys are in Marwar. They make advances to traders shopkeepers and husbandmen, chiefly for trade purposes and sometimes to meet marriage and other expenses. They always require bonds and mostly take houses, fields, and ornaments in mortgage. Their nominal rates of interest are the same as those charged by Bráhman, Lingáyat, and Musalmán moneylenders, but in addition to interest, when making an advance, under the name of discount manoti and batta, they levy special cesses each of two to five per cent on the amount borrowed. They keep the same books as Bráhman moneylenders. As creditors they have a bad name for harsh and unscrupulous if not dishonest practices. Besides these moneylenders, an oil-seller and one or two pulse-sellers lend money. Moneylenders' clerks are almost all Brahmans. They write Modi and Kanarese and are paid £7 4s. to £9 12s. (Rs.72-96) a year.

Moneychangers or saráfs, numbering about twelve houses, are chiefly Bráhmans, Komtis, and one or two Lingáyats. They are patient and thrifty and fairly well-to-do with capitals of £10 to £50 (Rs. 100-500). They live in houses of their own, worth a

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His Money changera.

yearly rent of 12s. to £1 4s. (Rs. 6-12); their women do nothing but house work, and their boys go to school, where many of them learn English. They enter Government service and one has risen to the post of deputy collector. The monoychanger sits in his shop or by the roadside, buying and selling ornaments, and changing copper and silver coins or copper coins. Those who sit by the roadside are called *chinvirs*. They give copper for silver and silver for copper and levy a charge of (½d.) (½-a.) on each rupee. Kavdis or shells are never used in Dharwar, Be-ides the above classes one or two Shimpis carn their living as monoychangers.

Grain Dealers.

Grain-dealers, numbering 200 to 300 families, are found all over the town and suburbs. They include Linguyats, Brahmans of all classes, Maráthás, Musalmáns, Shimpis, Gavlis, and Kurnbars. They belong to two classes, wholesale and retail dealers. The wholesale merchants, of whom there are altogether about twelve or thirteen. are chiefly Lingayats with two or three Musalmans. They are rich. bringing or buying wheat and millet from Bagalkot in North Bijapur and Ranebennur and Gadag in Dharwar and the neighbouring villages; and rice from Haliyal and Mundgod in Kanara, Hulkop, Henigatti, Karkop, Kalghatgi, and other neighbouring villages. They dispose of the grain to retail sellors. They live in their own houses worth a yearly rent of £2 4s to £6 (Rs. 24-60). Their wives do nothing but house work and their boys go to school. The retail grain dealers, who are chiefly Lingayats, Marathas, Musalmans, and a few Brahmans, are found all over the city. They often carry on their trade partly by borrowed capital. As a class they are poor, living some in their own and others in hired houses worth a yearly rent of 6s. to 10s. (Rs.3-5). The wives of some of them sell in their shops. They buy partly from husbandmen in the markets, and partly from wholesale grain dealers. They are hardworking, sober, and thrifty. Some have a bad name for cheating their customers by using more than one set of measures.

Vegetable Sellers.

Vegetable-sellers, of whom there are about one hundred houses in different parts of the city are Lingayats, Marathas, Musalmans, and Bedars. They are hardworking, thrifty, honest, and sober. As a class they are poor, living from hand to mouth in houses of a yearly rent of 1s. to 2s. (Re. \frac{1}{2}-1). Their wives work as saleswomen, and their boys do not go to school. The gardeners grow their own vegetables, and the others buy from gardeners. They sell to all consumers and to neighbouring villagers, who buy on market days. Head-loads of fuel in the morning and of grass in the evening are brought for sale in the market or in the town by Bedar, Kakar, Pendhári, Mhár, and other women. Bedars and Mhárs bring fuel from eight or nine miles and do not get more than 6d. (4 as.) the head-load. They live from hand to mouth. The grass is their own property or is brought from wholesale sellers who buy up entire meadows or kurans and stock the grass in large heaps or banvis outside the town.

Sugar and Spice Dealers. Sugar and Spice dealers are of two classes, wholesale and retail. The wholesale dealers Lingáyats and Komtis number about eight houses. They live chiefly in Dharwar town in Haveripeth. They

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are thrifty, sober, hardworking, and well-to-do with capitals of £100 to £200 (Rs. 1000 - 2000), living in houses worth a yearly rent of £1 4s. to £1 16s. (Rs. 12-18). Their women do nothing but house work and their boys go to school from seven to fourteen. They bring spices from Belári, Kadapa, Bangalur, and Bombay and sell them to retail dealers. Of retail sugar and spice dealers there are about thirty houses chiefly Lingáyats, Komtis, and one or two Musalmáns. The retail dealers are not well off. Their capitals vary from £10 to £20 (Rs. 100-200), and they live in houses worth yearly rents of £1 4s. to £1 10s. (Rs. 12-15). Their women do house work and sometimes sell in their shops; their boys are sent to school. They buy from wholesale dealers and sell to consumers. Dealers in sugar and spice also deal in salt. There are no separate salt sellers.

Oil-sellers are of two classes, Lingáyat Ganigerus and others of all castes. About eight families of professional oil pressers and sellers are scattered over the town, besides four families in Narayanpur. All of these are Lingáyats. Each family or group of families has one or two oil presses in their houses, in which they press sweet oil from the seed of the yellu and gur yellu varieties of sesamum, from pundi or hempseed, agsi or linseed, and helkadli or groundnuts. Many of them are wholesale dealers. They buy large quantities of imported sweet oil, as well as oil pressed in Dharwar and sell it retail. Besides these most grain and other merchants deal in sweet oil. They live in substantial houses of their own worth a yearly rent of £2 8s. to £4 16s. (Rs. 24-48). The retail sellers live in houses yielding a yearly rent of G. to 12s. (Rs. 3-6). Their wives sell oil in their own houses or in the market. Their boys seldom go to school. Of late the Dharwar oil-pressers and dealers in country oil have suffered greatly from the competition of kerosine Almost every shopkeeper, and every other person who has a few rupees to spare, imports and sells kerosine oil. Even some of the professional oil-pressers themselves sell kerosine. So keen is the competition that some professional oilmen have been obliged to give up their hereditary trade in oil and take to new pursuits.

Of Butter-sellers there are about twenty-seven houses of Gavlis or cowherds living in Dhárwár town and in Saidápur. Their women sell milk and curds or mosaru. As their buttermilk is mixed with water, Bráhmans, Lingáyats, Jains, Komtis, and Rajputs do not buy it as they hold it impure. They live in houses worth a yearly rent of 6s. to 12s. (Rs.3-6). Their wives do house work, churn buttermilk and make and sell butter. Their boys do not go to school. The local supply of butter falls short of the demand and large quantities of butter are brought by hte Hindu market women from the surrounding villages in small earthen jars called chatgis to the Tuesday market. People buy and clarify this butter and use it. Grain and spice dealers also buy a good deal of this butter on market days, clarify it, and keep it for retail sale, in large round earthen jars called kodás. They sometimes export the

clarified butter in tin cans to Bombay.

Milk-sellers or Gavligorus, numbering about fifty houses, are Lingayats and Marathas. They are settled in Dharwar and Saidapur. Chapter XIV.

DRIEWAR. Sugar and Spice Dealers,

Oil Sellers.

Butter Sellers.

Milk Sellers.

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They are poor but not in debt living in their own houses with a yearly rent of 12s. to £1 4s. (Rs. 6-12). The women sell milk and their boys do not go to school. They keep cows and buffaloes and sell milk to all classes.

Liquor Sellers.

The liquor contract of the Dharwar sub-division is farmed every year to the highest bidder. In 1883-S4 it was let for £3400 (Rs. 34,000). The contractor manufactures country liquor in his distillery in the north-east of the town and sells the liquor in two retail shops. The liquor is made by boiling coarse sugar or gul with a bark called biallad toti, or ippi that is Bassia latifolia flowers. or with the kernel of the woodapple. Country liquor is sold at 1s. to 1s. 6d. (8-12 as.) a bottle, according to its strength and quality, Except Brahmans, Lingayats, Komtis, and Jains, all classes drink openly. The chief consumers are Musalmans, and Holerus, Bedars, and other low casto Hindus. European liquor is imported into Dharwar and sold in retail by two or three Parsi merchants in the town. Besides country spirits toddy or fermented palm juice is sold at 14d. (1 a.) the bottle. The right of tapping wild-date palms in the Dharwar sub-division was sold in 1883-84 for £1102 10s. (Rs. 11,025).

Honey Gatherers,

Bedars and Maráthás gather honeycombs when in the forests and hills cutting firewood. They sell the honey to townspeople or sugar and spice merchants at about 6d. to 2s. (Re.1-1) according to the size of the comb and the kind and quantity of the honey. Honey is of two sorts, a superior kind gathered by large bees and an inferior kind gathered by small bees. Up to about 1810, the privilege of gathering honey from the forests of each revenue subdivision of the district of Dhurwar was yearly sold to the highest bidder. About 1840 Government abolished honey sales. Within the last ten years the officers of the forest department every year sell the right of gathering forest honey to the highest bidders. During the three years ending 1882-1883, the honey farm yielded £60 16s. 6d. (Rs. 6081) in the four sub-divisions of Dharwar, Kalghatgi, Bankápur, and Hángal. Sugar and spice merchants buy honey from the honey-gatherers and keep it in earthen jars or glass bottles and sell it to consumers at about 6d. (4 as.) a sher of twenty tolús or rupees. Sometimes the honey-gatherers sell the honey direct to consumers.

Cloth Sellers.

Sellers of cotton wool and silk clothes number about fifty. They live chiefly in Mangalvar 'Peth street, while some who live in Haverspeth have shops in Mangalvar peth. They are chiefly Lingayats, a few Brahmans, eight or ten Shimpis, and about fifteen Marvadis. All the Lingayat and Marvadi merchants are wholesale traders, five or six of them rich with capitals of £500 to £800 (Rs. 5000 - 8000). The rest have little capital and carry on their business by borrowing. There are also two joint stock company cloth shops. They sell both hand-loom and factory-made cloth, and besides importing from Bombay, Bangalur, Belári, Belgaum. Gadag, Hubli, and Tadpatri, buy cloth from the hand-loom weavers in Gadag, Hebli, and the neighbouring villages of the Dhárwar district and in Kittur, Hongal, and other neighbouring villages in Belgaum.

They sell the cloth to retail dealers and consumers. The women of the cloth sellers do nothing but house work and most of their boys learn to read and write. The retail sellers are Shimpis and Marvadis, of whom there are about twenty houses. The woollen cloth is chiefly flannel, and broadcloth brought from Bombay, and used by Government servants, lawyers, and others of the richest class. White blankets called dhablis are in great demand both among the rich and poor, as all high caste Hindus wear them after bathing. waistcloths, bodices, and handkerchiefs are brought from Bombay and Poons and sold to almost all the rich and middle classes who buy them at the time of weddings and when a woman comes of age. Besides by the regular dealers, cotton cloth is sold by one or two Bombay Bohora peddlars. The Salis sell the produce of their looms in the market on Tuesdays. Rough blankets or kamblis are brought from the neighbouring villages and sold by Kurubars or Dhangars. All the leading cloth shops are in Javh Peth, which is a portion of the old market in the Mangalvar part of the town. Most of the valuable cloths are sold here. Hand-weven cloth of small value, brought by weavers living in the neighbouring villages on market days, is sold in the new Robertson market outside of the

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Cloth Sellers.

Shoe-rellers are all Madegerus and Mochigararus. Details are given under Leather Workers.

Shoe Sellers.

Ornament-sellers of whom there are about fifty houses in all parts of the city include five monoylenders or saráfs, twenty goldsmiths, five Manigars, and fifteen bangle-sellers. Some account of them has been given under these heads. Saráfs and goldsmiths sell gold and silver ornaments, Manigars sell lac and China glass bracelets, and bangle sellers sell glass bracelets of different colours, description, and sizes.

Ornament Sellers.

Animal-sellers are generally poor though some of them are men of capital. They bring cows, bullocks, buffaloes, ponies, sheep, and goats on Tuesdays to the market from the surrounding villages, and from Nargund, Navalgund, Hubli, Ránebennur, and Maisur. They are Lingayats, Maráthás, Musalmáns, and Jains. The cattle of this country is of the common sort and costs £2 to £6 (Rs. 20-60) for bullocks and buffaloes, £1 10s. to £3 (Rs. 15-30) for cows, and 2s. to 8s. (Rs. 1-4) for sheep. Maisur cows and bullocks of superior breed are brought only by Maisur people. They cost £10 to £30 (Rs. 100-300) a head.

Animal Sellers.

Besides sugar, kerosine oil, and furniture, Pársis, Bombay Musalmáns, one or two Dhárwár Shimpis and a few ordinary tradesmen sell drugs, hardware, paper, and almost all European articles except liquor which is sold by Pársis and Bombay Musalmáns only. The miscellaneous articles of European make which are most used by natives are paper, caster oil, lavender-water, scents, quinine, penknives, scissors, needles, inkstands, and match-boxes.

Europe Shops.

There are about twelve brokers or daláls in Dhárwár. Two or three Komtis are employed exclusively upon this work, and get from the sellers a commission of 3d. to 6d. (2-4 as.) for each cartload Brokers.

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of goods other than grain, such as sugar, coarse sugar or molasses, betelauts, coccanuts, Husbindmen, of whom there are about 400 houses, are found in all parts of the city. They are Lingayats, Marsthis, Bedars, Mhurs, and Musalmane. They are hardworking and solver, and are not extravagant on marriage and other occasions. At the same time they are careless and wanting in thrift and wasteful in many of their ways, and free-handed to excess in their gifts to village revents. Except in ploughing, the women help in almost every process of bushandry, and after they are eight years old, the boys are too weful in minding cattle and watching fields to be spared to attend relicol. They have houses of their own worth a yearly rent of 8s, to 12s, (Rt. 4 - 6); they have generally two pairs of bullocks and sometimes four and a pair of two he-buffalors. Some Marathas Linguistant and Mhars employ themselves as farm rervants; others have rich watered land well tilled and yielding valuable crops. Still most of them are in debt, foolishly taking a lyantage of the money. lender's rendings to make them advances. The chief fruit and regetable growers are Maráthés, Lingávate, and Musalmans,

Several moneyedmen, Lingáyats, Maráthás, Gavlis, and Masalmáns purchase yearly from Government the grass grown on me slows, and hiro corvants to cut, cheave, and carry the grass, which is stored in large leaps or b arcis outside of the town. The grass is sold at about 6s. to 10s. (Rs.3-5) the thousand bundles.

Lice Pounders.

Rice is pounded or ground in we den grinding-mills by Lingsynts Musulmans and Marithas of the labouring class. They pound or grind and clear the rice and sell it throughout the year. They also sell rice wholes de and sometimes in retail. Their women help in cleaning rice. They are fairly well-to-do and live in all parts of the town. Sometimes the rich employ them in pounding and cleaning rice for home use.

Almost all sellers of articles of native furniture, earthen pots.

The regetables grown in the rainy saven area [4] Vegetables up, we fruit only is used tools, ending, south, kapal, here, padeal, elamili, receive, dearceasia, tetral, tudin, karbal, elegandaris, conti, alear di, edei kapal, topathiri, bendes such latopean regetables as pear and tears. (2) Veretables uboo leaves thy are used region, then, receive, chili, latiprope, singul lockshi, gheli, chili, agai area, and a que, bendes such broop in tegetables also continuity deli, anothe padeal, opini, urleg al i, sustre padil, bilinale again, arritani pili, regione, and severapida. The regetables are grown in the cold reason are: (1) Vegetables at see fruit only is and auris, ball is, they wish, sarati, less it, majo, that, kelper oil, south digendal.

The vegetables grown in the cold reason are: (1) Vegetables in the Irit only is used mart, but in, they will saved it, in pin, it had, helper tell, sand, i needed, Lation wil, cheparadaean, but adverse, but but did, and chellerenis. (2) Vegetables whose leaves only are used hadii, health, heads, and profit (3) Vegetables whose only are used genera, urally orbit, and come other roots grown in the rainy season.

In the hot recease, except where pend, well, brook, or once water is available, vegetables are relating grown. The fruits are: rivals, receive, pitris, helsis, onjur, ddlimb, sim halla, ramphalla, belli, mirit, penegi, tors, ketalli, att, belsis, petti, black and white grapes, water and muck melons, perpeti, kaki, kervii, papelmous. Pine-apples and oranges do not grow except in one or two gardens at Dharnate.

wooden boxes, bedsteads, stools, carpets, and mats, are makers as well as sellers. They are settled all over the town living in houses worth a yearly rent of £14s. to £28s. (Rs.12-24). Brass and copper vessels are made at Dhárwár only by two Muhammadan families. But they are imported from Hubli, Poona, and Násik by Jain Bogars who sell them retail. The Bogars live in houses worth a yearly rent of £28s. to £416s. (Rs. 24-48). Couches, chairs, and other articles of European furniture are sold by about three Pársi merchants and two or three Hindu carpenters.

The women of the rice pounding and grinding class purchase togari, kadli, uddu, hesaru, and other pulse from husbandmen or shopkeepers and prepare biâli or split pulse. They grind the pulse and separate the fine parts called biâli from the husk and sell the biâli wholesale or retail to consumers, of whom there are many from the neighbouring villages. The husk is sold and given to cattle. Pulse-sellers live in all parts of the town. Sometimes rich people employ them in grinding pulse and making it into biâli for home use.

Grain is reasted by Pardeshis, Lingáyats, Maráthás, and Komtis, who reast rice, gram, and peas. Reasted rice is prepared in three forms, avalaki, churmuri, and aralu. Reasted kadli pulse is called putháni. Some of the grain-reasters have shops. They are poor and live in different parts of the town.

Sweetmeat-makers also called Halvais or Mitháigars, of whom there are about twenty-five families, are Maráthás, Pardeshis, Lingáyats, and Konkani Bráhmans living in Mangalvár Peth and in the old Regimental Lines. Many of them are old settlers in Dhárwár. They prepare pedhes, barfis of three kinds, haliva, khobri, and keshri, and bathása, bendhu, and kalliansái. At fairs and during the Holi festivals in March - April they prepare necklaces of figures of sugar and milk as also sugar figures of cocoanuts, temples, palanquins, horses, elephants, and fruit. All classes buy these. Pardeshis and Bráhmans prepare bundeda and other laddigi or sweetmeat balls and three other kinds of sweetmeats jilibi, chekli, and gillginchi. Very religious Bráhmans do not eat these as they are considered impure.

Some account of oil and liquor makers and sellers has been already given.

There are about sixty families of butchers. About twenty of them are Láds and the rest Musalmáns. The Láds are mutton butchers alone, and of the Musalmáns some are mutton and some beef butchers. They live in the north-east and north-western parts of the town and a few live in Háveripeth. They buy cattle and sheep on market days from shepherds or other cattle dealers. Lingáyats and Bráhmans object to sell their animals to these men. A mutton and a beof market have been newly built by the municipality. There are also two slaughter houses; one for slaughtering sheep and goats and the other for slaughtering cows and bullocks.

Fishermen, numbering about twenty houses, belong to the Bhoi or Ambikar that is river sailor classes and are all settled in the town.

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DHARWAR.
Furniture Sellers.

Pulse Sellers.

Grain Roasters.

Sweetmeat Makers.

Butchers.

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Bis Fishernen.

They are hardworking and orderly but fond of liquor, and poor, living in houses with a yearly rent of not more than 6s. to 8s. (Rs.3-4), and earning about 6d. to 9d. (4-6 as.) a day. They are generally in debt. Their women help in selling fish; their boys do not go to school. Besides selling fish the men carry palanquins. Several Bhoi women buy dried fish from the neighbouring Portuguese territory and sell it to consumers.

Hèns and eggs are sold by Musalmans, Marathas, and Bhois, on market days or daily in their houses. Some Maratha and Musalman husbandmen also sell hens and eggs.

Stone-cutters.

Stone-cutters or Kallukattakarus are Maráthás and Vaddars. There are about twenty families. They live in different parts of the town. They are sober and hardworking and earn 1s. to 1s. 6d. (8-12 as.) a day. They prepare carved stone work, stone idols, and all stone work. The women gather and soll dried cowdung cakes and help the men.

Brick-makers,

Bricks are made by about twenty families of Maráthás Musalmáns and Lingáyats. They live chiefly in the town of Dhárwár and in the village of Málápur, and make burnt bricks and small red tiles in the neighbourhood of the Gulganjikop and Kompkeri ponds. The bricks sell at about 14s. (Rs. 7) and tiles at 8s. to 14s. (Rs. 4-7) the thousand. They are sober, honest, well behaved, and hardworking but dirty. They are a poor class, living in their own houses worth a yearly rent of 6s. to 12s. (Rs. 3-6). With the help of their wives they gather rubbish for their kilns and bring it either on their heads, on asses, or carts. Their boys, who never go to school, help them when about ton years old. They earn 6d. to 7½d. (4-5 as.) a day. They make no earthenware. People of the labouring class make sun-dried bricks but not tiles, and sell them at 6s. to 8s. (Rs. 2-3) the thousand.

Tilers.
Carpenters.

See Brick-makers and Earthen-ware makers.

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Carpenters, all Páncháls, number about seventy houses and live in all parts of the town and in Saidápur and Hosyellápur. They are hardworking and soher, and have steady and well-paid employment. They have no capital and live in houses worth a yearly rent of 6s. to 12s. (Rs. 3-6). Their wages are high varying from 1s. to 1s. 6d. (8-12 as.) a day and they are seldom without work. They do not work as labourers. Their women do not help except in looking after the house. Boys begin to work from ten or twelve. Some go to school. Besides house-building, which is their chief occupation, they make carts, field tools, and furniture. They have no special skill and only make articles to order.

Blacksmiths.

Of Blacksmiths who make hinges, locks, and other fatings, some account is given below under Iron-workers.

Lime-burners.

Lime-burners or Sungardrus, of whom there are about forty houses living chiefly in the town, prepare lime or chunam. The lime is prepared by burning in kilns two parts of small pieces of limestone and three parts of charcoal. The limestone they bring in carts from fields about two miles cast of Dhárwar and the charcoal is brought from charcoal-makers. They buy

manure in Dhárwár, at about ten cartloads the rupee, carry it, and spread it on the fields. In return, the owners of the fields allow the lime-burners to dig for limestone in different parts of their fields, and to carry away as many cartloads of it as they can so long as they fill the holes. Thus limestone costs the burners as much as they pay for the manure and the hire of labour, that is about 6d. (4 as.) for a cartload of ten baskets full. Each basket holds about eight Dhárwár shers of twenty tolás or rupee-weights each, and one hundred and twenty shers make one heru. Charcoal is bought at a rupee for a phara of eight baskets full. hundred and twenty-eight shers of limestone and 192 of charcoal are put into a kiln and the kiln is lighted. In twelve hours the limestone is turned into one hundred and twenty-eight shers of lime, which fetches about 6s. (Rs. 3). Each lime-burner's house has three or four kilns in front of it. The kilns are circular in form and about five feet high with an inner diameter of two and an outer diameter of four feet. The women help in doing the kiln work and selling the lime either in the market or in their houses. They are poor, but have houses of their own worth a yearly rent of 8s. to 12s. (Rs. 4-6). Their boys do not go to school; they begin to help their parents when twelve years old.

Thatchers are Lingáyat Maráthás or Musalmán labourers. They are employed to thatch houses in the beginning of the rainy season. They are engaged either by contract or daily wages averaging about 9d. (6 as.) a day. The thatching season lasts for about six weeks from early April to mid-May.

There are about eleven houses of painters called *chitrakars* or *jingars*. They live in their own houses worth a yearly rent of 6s. to 12s. (Rs. 3-6). They paint house fronts with well drawn and well coloured figures of considerable grace and naturalness. They also draw similar figures on paper and paint wooden cradles and figures of native idols, especially earthen figures of Ganpati and Kám during the Ganesh-chaturthi in September-October and the Holi-hunvi in February-March. The figures sell at 1s. to £5 (Rs. ½-50).

There are about 400 houses of weavers, most of them Lingáyats. They are hardworking sober and orderly. Some live in their own, and others in hired houses, paying a yearly rent of 6s. to 12s. (Rs. 3-6). They work on borrowed capital and are generally in debt. The women arrange the threads and do almost every part of the process of weaving. The children are early useful and are seldom spared to go to school. They weave waistcloths, women's robes or siris, and all sorts of coarse cloth with silk or cotton borders. They suffered much in the 1877 famine, but are again (1884) well employed though poorly paid. Most of the cloth used at Dhárwár is brought from Hubli.

Tailors or Shimpigerus, numbering about 120 houses, are mostly in the town of Dhárwár. They are hardworking sober and thrifty, but have a bad name for stealing portions of cloth given to them to sew. A few are fairly off, free from debt, having credit and being able to save. The rest are poor, some free from debt, and others in debt.

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Dhirwir.

Lame-burners.

Thatchers.

Painters.

Weavers.

Tailors.

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Places. Dhárwán. their boys do not go to school, but after twelve help their fathers. They wash all clothes and have constant work, making with the help of their wives about 7½d. (5 as.) a day. The great fault of the washermen is that when good clothes are given to them to wash, they wear them for three or four days before they wash and return them to their owners.

Bedars.

The Bedars who correspond to the Rámoshis, Kolis, and Bhils of the Deccan are not like them employed as watchmen. Some are settled towards the east of Dhárwár near the Navlur gate and others to the west of the town near Tirmalráo's street. They live in small tiled and thatched houses. Both men and women act as labourers. During the tamarind season they gather the ripe fruit from the trees and separate the pulp from the berries. They sell the pulp to shopkeepers and consumers and the berries to blanket-makers. In their season (April-June) they buy and sell mangoes and guavas. At other times they bring sticks, banyan and muttala leaves from the forests and sell them to the townspeople, the sticks as fuel and the leaves as plates and for cups. The men go to hunt regularly in January. Both men and women are fond of liquor and of quarrelling. Bedars have given up robbing and open violence but still steal to some extent.

Labourers.

Labourers live in all parts of the town. They are chiefly Lingáyats, Maráthás, Musalmáns, Bedars, and Mhárs. When other work fails the destitute of almost all classes take to labour.

Field Workers.

Field workers generally Lingáyats or Kánarcse, Marátha, Musalmán, Bedar, and Holeru women earn 3d. (2 as.) a day for weeding, and, in harvest time, are paid five sheaves out of every hundred. By grinding grain and pounding rice poor women of almost all classes make $2\frac{1}{4}d$. to 3d. ($1\frac{1}{2}$ - 2 as.) a day.

Carriers.

Carriers of bundles chiefly Maráthás, Lingáyats, and Musalmáns are paid $1\frac{1}{2}d$. (1 a.) for a trip to any place within the town and $1\frac{1}{2}d$. (1 a.) a mile outside the town within municipal limits. There is a special class of carriers known as Motligars, who store grain and unload carts getting 6d. (4 as.) a day for their labour. There is a considerable demand for labour on the earth work now in progress for the Marmagoa-Belári railway and on public roads. The workers are chiefly Holerus, Bedars, Musalmáns, Maráthás, and Lingáyats. The men earn daily 6d. (4 as.), the women 3d. (2 as.), and the children $2\frac{1}{4}d$. ($1\frac{1}{2}$ a.).

House Builders.

House-building causes a considerable demand for unskilled labour chiefly in making cement and helping the bricklayers and masons. The ordinary wages are 6d. (4 as.) for a man, and 3d. (2 as.) for a woman. Every year before the rains, tile-turning employs a large number of Lingayats, Maráthás, Bedars, and Musalmáus.

Players,

Players or Bájantrigararus, include Kshetridásás and Korvars who play on three flutes two called bájantris and the third suti, a drum called sambal worn at the waist, and cymbals or jhampali, sárangiválás or harpers, and tableválás or drum heaters, who play for dancing girls, and, if Bráhmans, perform in temples or houses when the religious service called Harikatha is going on; Dasaru

players, who play a drum called daf, a musical stringed instrument called tuntune and cymbals or jhanji; and Rádha players who play on the drum called madli and strike the tála a small and massive cymbal. No actors or Bahurupis live in Dhárwár.

Places.
Dnárwár.

Among animal-trainers are the Gárudis who go about with serpents, and the Nandiyeth-navarus who have performing or misshappen bullocks.

Animal Trainers.

There are no resident professional athletes in the town of Dhárwár; but several young Lingáyats, Maráthás, Musalmáns, and Bedars perform athletic exercises and wrestle with each other in public for pleasure's sake on great festivals.

Besides the large class of the old destitute and idle of almost all

Athletes.

Religious Begyars.

castes, there are in Dharwar three leading schools of ascetics, Sanyásis, Bairágis, and Gosávis. There is only one Sanyási at Dharwar, who belongs to the Smart sect. He lives in a temple and goes for his meals to any Brahman's house of his sect. cats only once a day between sunrise and sunset. He does not accept any money offerings. His clothes are of a red ochrey colour and are supplied to him as gifts. His wardrobe includes a white blanket, two waist and two shouldercloths and two loincloths or langotis, and a covering cloth for use at night. He has a vessel to hold water called kamandal made from a dried gourd, and a staff called dand, to hold in his hand. He never cooks. Sanyasis worship idols and others do not. Bairagis marry and form a distinct sect but there are some celibates among them. four families of Bairágis in Dhárwár who live in their own houses. They do not eat from the hands of Brahmans. They keep the rules regarding ceremonial cleanliness and worship idols. They do not drink liquor or cat animal food. They marry among themselves. Brahmans and Marathas may become Bairagis. But a Brahman Bairági will not eat at the hands of a Marátha Bairági. Some travel and the others remain in one place. The travelling Bairágis move as pilgrims over the whole of India staying for months together at any place which takes their fancy, or where they can get plenty to cat. The settled Bairagis do not travel. At Dharwar they dress like Brahmans and worship idols. If they have no children of their own they adopt boys of their own sect, and failing this their property goes to the chief disciples. There is only one Gosávi in Dhárwár. Ho belongs to the sect of Puri and lives in a temple of Hanuman. He is poor and lives by begging. He does not wear the sacred thread. He cats animal food and drinks liquor, and takes food from Brahmans and Marathas. It is from the Marátha caste that Gosávis are chiefly recruited. They worship Their birth and marriage customs are the same as those of Maráthás and they bury their dead. They rub ashes on their body and gather alms in a wallet called jolgi, which hangs from the left shoulder. At Maratha caste dinners Gosavis are given the first seats, and are treated with more respect than any other class except Bráhmans.

Baird ns

Good tis.

Potters, of whom there are about fifty families, are all

Potters.

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Dukuwan.
Potters.

Lingáyats. They live in different parts of the town of Dhárwár, Háveripeth, Saidápur, Málápur, and Náráyanpur. They bring earth on asses from the Kopadkeri pond and the valley of Attikole about a mile south of Dhárwár, mix the two earths together and from the mixture make pots, cups, and dishes of various shapes and sizes to hold water, to cook in, and to eat from. They do not make bricks. They also bring earth from the Herckeri pond and from it make large tiles, which they sell at about 14s. (Rs. 7) the thousand. Their women and boys who do not go to school help their parents. They are poor and live in their own houses worth a yearly rent of 8s. to 12s. (Rs. 4-6), They are sober, honest, well behaved, and fairly hardworking but dirty.

Cart Hirers.

Of cart-hirers there are about 133 families, who live upon hiring their carts at about 18d. to 2s. (Re. §-1) a day. If they have to go any distance the hire is arranged by contract. By easte the hirers are Lingáyats, Maráthás, and Musalmáns and one or two Rajputs. Their women do not help; and their boys do not go to school. They are settled all over the town. Altogether about 500 country carts are owned by the townspeople and about 133 are offered for hire.

Betel Leaf Sellers. Betel-leaf Sellers, numbering about twenty-six are settled chiefly in the town of Dhárwár. Some of them are Musalmáns and others Chatris and Maráthás. They buy betel leaves wholesale at Ránebennur, Háveri, Shiggaon, and one or two other places, bring them in cart-loads, and sell them retail at Dhárwár at the average rate of 1½d. (1a.) for a hundred leaves. Their women help them in keeping the leaves clean and selling them in their shops. Their boys go to school. Their net monthly carnings are 8s. to 12s. (Rs. 4-6).

Cooks.

Of Bráhman cooks and water-bearers, there are about forty-four. Some of them are employed in Bráhman families on monthly wages varying from 10s. to £1 4s. (Rs. 5-12). Others work on contract when dinners are to be given to large parties of Bráhmans. The hire of watermen, in such cases, is three-fourths the hire of the cook. The contract is made according to the kind of dinner and the number of guests. They live in houses yielding a yearly rent of 6s. to 12s. (Rs. 3-6). Very few have families; the rest are bachelors. They dress in such rich clothes that it is difficult for a stranger to know that they are cooks and watermen, Only when at work do they appear in dirty clothes.

Pony Hirers.

About 200 Pondháris and 100 Kákars let ponies on hire at about 1s. (8 as.) a day. For greater distances their hire is about 6d. (4 as.) the kos of three miles. They are settled in two or three parts of the town and in Háveripeth. All are Musalmáns and they eat together. The Kákars do not marry with the Pendháris, Those who have no ponies bring firewood or grass and sell it at 4½d. (3 as.) a head-load. They sometimes work as labourers, The women help the men, and the boys do not go to school.

Snuff Makers.

Three snuff-makers in the town of Dhárwár all belong to the Velál or Modliár caste. They make fine snuff like Belári snuff and sell it at 3d. (2 as.) the quarter sher weighing six rupees. They speak the Tamil language and came from the Madras Presidency about fifteen years ago. Since their arrival all the old Lingdyat snuff-makers have lost their trade. One of the three Vehils also binds books and another sells stamps in addition to making snuff. As snuff-makers their yearly profits are about £10 (Rs. 100). Their women help in making snuff, and their boys go to school.

Of four stamp-vendors one is a Velál, one a Komti, and two Bráhmans. They are settled in the town of Dhárwár. The women of the Komti and Bráhmans do nothing but house work. Their yearly profits are about £15 (Rs. 150). Their boys go to school.

Five private printing presses are employed in the town and lithograph newspapers and other small papers in Kánareso Maráthi and English.

Of gold washers there are thirteen houses in the town of Dharwar. They belong to the fishermen caste. Both men and women collect the sweepings of the houses of goldsmiths and the rubbish of the bath-room watercourses of the houses of the rich and wash it in hopes to find particles of gold which they melt and sell. Each family earns about £10 (Rs 100) a year. They also sometimes work as labourers. Their boys do not go to school.

About sixteen Musalman families of Bhistis carry water in largo leather bags on bullocks and in smaller bags on their shoulders. They are settled in the Musalman quarter of Dharwar. Their wages amount to £1 to £1 10s. (Rs. 10-15) a month. Their women do not help and their boys do not go to school.

Nine Musalman and one Lad perfumer are settled in the town of Dharwar. They make native perfumes and sell them to the townspeople. The yearly profit of each family is about £10 (Rs. 100). Their women help in their work and their boys do not go to school.

Of fifty-five timber traders two are Pardeshis, one a Konkanasth Bráhman, and the rest are Lingáyats and Musalmáns. The Pardeshis and the Konkanasth are settled in the Hindu quarter, and the Musalmáns in the Musalmán quarter of the town. They bring timber from Haliyál in North Kánara and other Government wood stores, and sell it in retail at Dhárwár. Much of this timber is exported to East Dhárwár. The yearly profit of each family of timber-dealers is £10 to £50 (Rs. 100 - 500). Their women do not help except by minding the house and their boys go to school.

About twenty sellers of boads, small looking-glasses, thread, needles, small tin boxes, and wooden combs, are called Manigararus and are settled in the town of Dhárwár. About half of them are Telangis and the rest Musalmáns. Their women do house work and sell some of the articles. Their boys do not go to school. Each family earns about £10 (Rs. 100) a year. Some of them are very poor.

Soventeen Musalman bakers are settled in the Musalman quarter of the town. They make bread for the use of Europeans and Eurasians Chapter XIV.

Duárwar.

Stamp Vendors.

Printing Presses.

Gold Washers.

Bhistic.

Perfumers.

Timber Sellers.

Bead Sellers.

Bakere.

DISTRICTS.

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DHARWAR.

Chalvadi.

in the civil station and for some Musalmans. The women help and do house work. Some of their boys go to school. The profit of each family is about £10 (Rs. 100) a year.

In the whole of Dhárwár town there is one family of Chelvadis which is of the Holeru or Mhár caste. He is the religious servant of the Lingáyat community. His duties are to walk before Lingáyat processions and to stand at all Lingáyat meetings and marriages with a huge brass spoon on his shoulder to the end of which a bell is fastened with a long brass chain. Every now and then he loudly sings the praises of Basava, the founder of the Lingáyat religion, and gives a jerk to the bell. The community gives him presents in coin, cloth, and money. His profits are estimated at about £20 (Rs. 200) a year. His wife does house work and his boys go to school.

Basri.

Lingáyat and attends all Lingáyat meetings where women assemble, serves them with betelnuts, flowers, and perfumes, and calls Lingáyat ladies to these meetings. It is her duty also to invite Lingáyat women to dinner on important occasions. She never marries and is allowed to practice prostitution. She receives presents from the Lingáyat community and her profits amount to about £10 (Rs. 100) a year. No Lingáyat assembly is considered complete without the Chalvadi and the Basvi. When a Chalvadi has no son or a Basvi no daughter, he or she adopts a boy or girl of their own class.

There is also a female religious servant called the Basvi. She is a

Tinuers.

Two Musalman tinner families at Dharwar tin all copper and brass cooking vessels. Their women do not help and their boys do not go to school. The profit of each family is about £20 (Rs. 200) a year.

Blanket-edyers.

Two Kurubar or shepherd families employ themselves in edging country blankets with silk or woollen thread. They are paid 1s. to 2s. (Re, ½-1) for each blanket. Their yearly profits are about £5 (Rs. 50) each. Their women help, and their boys do not go to school.

Vibhuti or White Ash-makers.

Dharwar has four Lingayat families who make white cowdung ashes, and sell them to Lingayats. Their women help and their boys do not go to school. They are poor earning just enough to live on.

Cotton Cleaners.

Of cotton cleaners in the town of Dharwar there are thirty-six Musalman families. They beat and clean cotton at the rate of about 1s. (8 as.) a man a day. They are poor and live in their own houses worth a yearly rent of about 12s. (Rs. 6). The women help and roll the beaten cotton into rolls about a foot long and half are inch thick, which the women of the Lingayat husbandmen spin into thread.

Cotton Traders.

Twelve families of cotton traders are settled in Dhárwár. They live in houses yielding a yearly rent of £1 4s. to £2 8d. (Rs. 12-24) Besides these, grain and other merchants trade a little in cotton.

Private Servants.

About 300 Brahman, Bedar, Jain, Kurubar, Lingayat, Maratha and Musalman families servo in the houses of the rich as horse-

keepers, carriage drivers, cow-dungers, cloth-washers, and messengers. Their yearly wages vary from £3 12*. to £9 12*. (Rs. 36-96). They are sometimes paid by the month and sometimes by the year.

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Dutawin.

Indigo-dyers number about six, of whom two are Maráthás and the rest Lingáyats. They are settled in the town. They dye cloths in indigo, and the women help. Their boys go to school. Each family saves £10 to £20 (Rs. 100 - 200) a year. They are well-to-do and able to save.

Indigo Dycrs.

About nine Lingsynt families import for sale cocoanuts from Nandgad, Háveri, and Ránebennur, and lemons from the two last places. The cocoanuts sell at the rate of about 1d. to $1\frac{1}{2}d$. ($\frac{3}{4}$ -1 a.) each, and 100 lemons for 9d. (6a-.). Their women help and their boys go to school. Their yearly profits are about £3 (R4. 30).

Coroanut and Lemon Sellers.

Bungle-sellers number about twenty-five families, who have settled in Dhárwár. About ten of them are Musalmáns and the rest Jains. They buy glass bangles of various colours and fit them to the wrists of women in the town. The price of the bangles vary according to their quality and size from \(\frac{1}{4}\). to 1d. (\(\frac{1}{4}\)\cdot \(\frac{1}{4}\)\). a bangle. Their women help; their boys do not go to school. They are poor and unable to save. They earn just enough to maintain themselves. Besides these in Háveripeth one family makes glass bangles.

Bangle Sellers.

Two Lingayat families in Dharwar make marriage crowns or bhasings literally brow-horns. The Lingayat marriage crowns are very large and ornamental, and are made of a light spongy water-plant and coloured paper and tinsel. Each crown costs about 2s. (Rc. 1). The marriage crowns of other Hindus are triangular in form and are made of paper and cost about 1½d. (1 a.). Their women help, and their boys do not go to school. They are poor and unable to save.

Marriage Crown

About forty families of blanket weavers, belonging to the shepherd caste, are settled in the town of Dhárwár. Their blankets cost 24. to 84. (R4. I-4). They are well-to-do but unable to save. Their women help and their boys after twelve.

Blanket Weavers.

Of professional dancing and singing women, there are fifteen families, Maráthás, Lingávats, and Musalmáns by caste. The Hindu and the Musalmán women who dress like Hindus and bear Hindu names, live in the Hindu quarter, and the Musalmán women who dress like Musalmáns and bear Musalmán names, live in the Musalmán quarter of the town. They sing Kánarese Maráthi and Musalmán quarter of the town. They sing Kánarese Maráthi and Musalmáni songs and dance both Karnatic and Hindustáni dances. They are a thrifty and well-to-do class with property worth £50 to £500 (Rs. 500-5000) and live in houses worth a yearly rent of £2 8s. to £1 16s. (Rs. 24-48). Their boys and girls go to school from seven to twelve and learn to read and write. At home the girls learn to sing and dance. The women also practise prostitution. Besides these, there are 105 families of women, who cannot sing or dance and gain their livelihood by prostitution alone. They are Maráthás, Lingáyats, Kurubars, Holerus, and Rainuts, and live in all parts of the city, in small houses or huts

Dancing Girls.

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worth a yearly rent of 12s. to £1 4s. (Rs. 6-12). They do not save, and their children go to school. They are not held in the same respect as the professional dancing and singing prostitutes.

Dukrwke. Rope Makers.

Seven Musalman families are employed in making hemp or coir rope. The ropes are six to eighty feet long and of varying thickness. A rope half an inch thick and eighty feet long costs 4s. (Rs. 2). They are a poor class and are unable to save. The women help and the boys do not go to school. They are settled in the town of Dhárwár.

Midwives.

Two Marátha and two Musalmán midwives are settled in the town and in Háveripeth. They charge 4s. to 10s. (Rs. 2-5) for each lying-in and also get the robe worn by women at the time of childbirth. Their husbands are labourers. They are poor and unable to save.

Bookbinders.

Two families of bookbinders, one a Musalmán and the other a Velál or Modliár family, are employed in the public service as bookbinders.

Cane Workers.

Two Chinamen settled in Dhárwár make and sell cane chairs and boxes. They are poor and have no credit.

Bamboo Sellers.

Three bamboo dealers bring bamboos wholesale from forests and sell them retail at Dhárwár, each making a profit of about £10 (Rs. 100) a year. They live in houses yielding a yearly rent of £1 to £1 4s. (Rs. 10-12).

Tinmen.

Three tinmen in Dhárwár make lanterns and small tin boxes. The lanterns, including glass panes, are sold according to size at 6d. to 4s. (Rs. $\frac{1}{4}$ -2). Their yearly profits clear of all expenses are about £20 (Rs. 200) each. Their women do not help, and their boys do not go to school.

Nightsoil Men.

Bhangis or Sweepers, mostly Musalmans, number about sixty families. They live chiefly in Saidapur. Several of them are employed by the Dharwar municipality to clear privies and remove nightsoil, and some are employed by the townspeople on similar duties. Their women do not help, and their boys do not go to school. They earn 6s, to 8s. (Rs. 3-4) a month.

Houses.

The 1881 census showed 5331 houses in Dhárwár, of which 1331 were of the better and 4000 of the lower class. The better class of houses are built with sun-dried bricks of reddish carth, and except about one hundred with whitewashed walls, the walls of all are plastered with mud. The lower class of houses are built with sundried bricks of black or reddish earth. The walls are strong and suited to the climate as they keep out the heat. As they have no windows the ventilation is imperfect, air coming in through the main door when open, through skylights in the case of flatroofer houses and through the tile partings in tiled houses. Most of the houses have a back courtyard, usually dirty and spoilt by a piprivy which sometimes remains uncleaned for years. Almost all the better built houses are modern. Not a single substantially buil house is more than sixty or seventy years old. Owing to the anarchy which prevailed at the close of the eightcenth century, the

country was so often overrun and plundered that most of the houses were either pulled down or burnt. People were chary of building large and substantial houses. In 1818 when the British took Dhárwár, the houses were small and few. The only two large buildings were the mansion of Bápuji Sindia, the commandant of Dhárwár fort, and the mansion of Trimbakráo Anna the Sar Subhedár of Dhárwár which was built about 1792. During the first fifteen years of British rule, the number of houses began to increase, but they were not of any size or beauty, as people were not sure how long British rule would last. Since then, though Dhárwár has fallen from its position, a good many new houses have sprung up en all sides and landed property has risen greatly in value.

Within the limits of the Dharwar municipality, are estimated to be about one hundred roads and lanes with an aggregate length of about sixteen miles, of which 31 miles are metalled. Besides the great north and south Poona-Harihar road which passes between the town of Dhurwar and the civil station, and the east and west Bijapur-Haliyal road which passes between the town and the fort of Dharwar and thence through the civil station, there are seven or eight chief roads in the city. Two east and west roads, the northern and the southern, run parallel to each other in The northern road joins the southern at the west end of Madihall by a small cross lane and passes west through Haveripeth, then turns a little to the south, and passing between the fort and the town, goes straight to the Collector's office and to all the bungalows in the civil station. It branches in two directions near the south gate of the fort, the north-west branch leading to the District Court, post office, travellers' bungalow, and the jail. Near the jail it joins the main Poona-Harthar road. The southern branch goes into the town of Dharwar. The east and wheat Hubli main road, entering the town on the east, proceeds westward through the town, first under the name of Mochigar lane, and, farther on, under the name of the big pond road, to the Kempke ri pond. From the pond it passes west to the German Mission holuse, Ulvi Basappa's temple, the Collector's office and other bungalows, and on to Haliyal in North Kanara. The great road Iknown as Kamankatta in the middle of the town starting from the east of the town, passes west as far as Kempkeri, from whence it follows the east and west Hubli main road. The castorn Hubli road enters the town on the east at Navlar gate and under the name of Hosvoni lane, passes the street bearing that name, turns a little to the north and then again to the west, under the name of Kodanpur street, and turns to the south to the Nuchambli well. From its turning point it passes west, under the name of Tirmalrao's street, as far as the end of the new village. It then branches in three directions, to the south to Mailarling hill Someshvar temple and Hubli, to the west to Ulvi Basappa's temple and Haliyal, and to the north-west to the Kempkeri reservoir, from where it follows the east and west Hubli main road. The Aminbhavi road enters Haveripeth in the north, passes south, and crossing the east

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DRARWAR.
Roads.

Hubli road, crosses the town under the name of Mangalvár state until it reaches the Kamánkatta cross street, and then under the name of Shukravárpeth street passes through the Navlur gate to Hubli. The sixth is another parallel north and south road which from the European burying ground near the fort, passes south through the town first under the name of Mangalvár street road, as far as the cross Kamánkatta street, and then under the name of Shukravár street road, joins the east Hubli road at the point where it turns a little to the north and then follows it. Two or three north, and south roads pass through the civil station and cross as many more east and west roads in the same locality. Sereal smaller lanes join the above main roads throughout the city and serve as short cuts to the main roads. Many of these lanes are extremely narrow and winding.

Gales.

Before the beginning of British rule the old town of Dhárwár was surrounded with a mud wall six or seven feet high with bastions at intervals. The town had five entrances adorned with equate topped gateways, which were closed at night, and watched by the village police. These bastioned walls have fallen. In some parts they have completely disappeared, in others the ruins give an idea of what they formerly were. The town has grown so much on all sides that there are no traces of the old gateways. Even the exact position of four of the gateways is not easily traced. The fifth gateway to the south-east of the town, known as the Narlur gate is also in ruins. The tops of the gateway and the doors have vanished. The two sides alone remain and they are much out of repair. The only two gateways in the city of Dhárwár which have any top arches are the two in the east entrance to the fort of Dhárwár.

Management.

Dharwar is throughout the year the seat of a District Judge and Sessions Judge, a first class subordinate judge, and a Civil Surgeor During the rains it is the seat of the Collector, the assistant and deputy collectors, the officers of the Southern Maratha reven survey, the police superintendent, the district engineer, and officers the forest and railway departments. It is also the head-quarters the chief revenue and police officers of the Dharwar subdivision a is provided with a jail, two court-houses, a municipality, and cin hospital, a high school, a training college, an Anglo-vernacular school, post and tolograph offices, a travellers' bungalow, and four rest-houses for native travellers.

Municipality.

The municipality was established in 1856 and was raised to a city municipality from the 1st of April 1883. In 1882-83 besides a balance of £321 (Rs.3212) the municipality had an income of £2510 (Rs.25,101) or a taxation of about 1s: 11d. (15 as.) a head on the population within municipal limits. The income is chiefly drawn from octroi, house, wheel, and other taxes. During the same year, the expenditure amounted to £2299 (Rs.22,990) of which £499 (Rs.4986) were spent in conservancy and cleansing, and the rest in repairing and lighting roads, in police charges, and in other miscellaneous objects. In 1876 the municipality

borrowed £3600 (Rs. 36,000) from Government to improve its watersupply. The chief works which have been carried out since the establishment of the municipality are sixteen miles of made read, of which three and a hulf are metalled, vegetable beef and mutton markets and slaughter-houses, an improved water-supply, three miles of drains, and three latrines.

Within municipal limits are six reservoirs, three pends or kuntas, two cisterns, and 614 wells. Of the six reservoirs five Hirekeri or Bág, Kempkeri or Lál, Kopadkeri, Halkeri or Moti, and Parmankatti are large, and are the chief sources of the city's water-supply. The sixth is a new large reservoir made by the municipality. The three pends or kuntas, Margamma Saidápur and Ulvi Basappa, are small and used for watering cattle and trees, and for washing.

The Hirekeri or Bag reservoir is on the south of the town near the village of Hosyellapur. It is the largest of the six reservoirs, being 42 acres in area, and capable of holding 508,332 cubic feet of water. It is much filled with silt and is used only for bathing washing and watering some lands to the east of it. The eastern part of the reservoir was once banked with lange stones and mud; but the whole is in ruins. If the embankment was repaired, and the silt removed, it would be able to hold three times as much water as at present. This reservoir has no steps. The temple of Rayar Hanuman stands close by on the north-cast bank of the reservoir. becomes dry as early as December. The Kopadkeri pond between the villages of Malapur and Gulganjikop on the north-west of the town has an area of 2170 acres and is capable of holding 356,388 cubic feet of water. It is divided into two by a dam, the part on the high ground being used by the people of Mahapur, Gulganjikon, and Kamlapur for drinking, and the part on the low ground for a vishing and for watering cattle and trees. At the end of 1851-82 were remained in it 48,333, and at the close of 1882-83 about 32,000 bic feet of water. This pond has a strong mud and stone embankant, but no steps. The Halkeri or great reservoir, the chief ke irce of the water-supply of the town, lies between the fort and hot town. It has an area of 62 acres and can hold 561,618 cubic bat of water. At the end of the south-west mousoon of 1881-82 it contained 483,984 cubic feet of water, and at the end of March 1882, 322,656 cubic feet; at the end of the south-west monsoon of 1882-83 it contained about 338,460 cubic feet, and at the end of March 1883, 315,500 cubic feet of water. It has stone and mud embankments in good order. Four flights of stone steps lead to the water's edge. On the southern embankment stand the German Mission Anglo-vernacular school, temples of Hanuman and Dattatraya, and two rest-houses. Formerly this reservoir used to fail in the hot season but it does not now, as it is fed by the new municipal reservoir on the south-west of the town, which is built from the Government loan of £3600 (Rs. 36,000) and is intended to supply the town with water through pipes. The Kempkeri or hal reservoir, in the west of the town and to the south of the road from the town to the Collector's office, has an area of 310 acres and is capable of holding 138,996 cubic feet of water. It is used

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Dukuwán. Reservirs.

for drinking and washing by the lower classes who live near it. It has embankments built of clay, stone, and mud, and on one side are steps. It dries in December: The Parmankatti reservoir to the north of the town and Haveripeth street, and on the west of the Dharwar-Aminbhavi road, has an area of 21 acres and can hold 112,220 cabic feet of water. In March 1852 it contained 33,666 cubic feet. It is used for drinking by the people of the neighbourhood and on one side is furnished with steps. It dries by December. The new reservoir to the south-west of the town which is intended to supply the town with drinking water by pipes was built in 1850 from a Government loan of \$3600 (Rs.36,000). It has an area of 1613 neres. It contained 361,665 cubic feet of water in November 1882. As it is more than a mile from the town it is not directly When necessary its water is led to the Halkeri or Moli Of the three smaller pends, Marganana, called from a small temple of Margamma or the Hindu cholera goddes-lie-alitle to the west of the Dharwar fort. It is used for watering cattle and The Saidapur pend to the north-east of the village of Saidapur is used only for watering cattle. Ulvi Basappa's pond, to the west of the town and near the Linguyat temple of Ulvi Hasappa is used for washing and watering cattle and also for watering a small garden.

Unteres

There are two large cisterns or hondas in the west part of the fort. The similar cirtern, about 2833 square yards and thirty-six feet deep, is in the ditch between the outer glacis and the fort wall, Water collected in the catchment of the western parts of the fort runs into this reservoir through a channel built on a level with the ground, under the outer glacis of the fort. From this the water runs into the inner and larger cistern within the fort, by means of another channel, on a level with the ground, built under the fort walls. larger eistern is within the inner wall of the fort. It has an area q 5856 square yards and is about eighty feet deep from the surfag of the ground. It is cut out of the hard schistic rock on which the Except at a few places near the surface the sides of fort stands. not built but in the upper and eastern side are some rude steft In very hot seasons both cisterns run dry. In the inner ciste is a well about ton feet square and twenty feet deep, and round the big well are smaller wells each three or four feet square. All these wells had sweet water springs. The big well had solid woeden shutters which can be opened or shut at pleasure. From these wells people used to draw their water-supply. A temple of Vithoba or Pandurang stands close to the north-east bank of the cistern.

Wells.

Of the 614 wells within municipal limits in December 1883, 485 contained brackish water fit only for bathing and washing, and 129 contained sweet water fit for drinking. Of the sweet wells twenty-two were step-wells, and 107 were draw wells. All the wells inside the town and villages are draw wells and are four to six feet square and seventy-five to eighty feet deep. All the wells inside the town of Dhárwár and the village of Hosyellápur are brackish. The people of this part of the town use the water of the Moti reservoir and of thirteen sweet water wells outside the town, six on the west, five on the south, one on the north, and one on the

south-east. The villages of Háveripeth, Kamlápur, Múlápur, and Náráyanpur havo 153 wolls all brackish and they therefore depend on the Kopadkeri and Moti reservoirs. The Madihall, Saidapur, and Gulganjikop villages have 116 sweet wells each about twenty-Besides these there are thirty-eight sweet wells in five feet deep. the European part of the station. They are ten to twelve feet square and vary in depth from seventy to eighty-eight feet. Agsar Bhávi a draw well on low ground to the west of the town is about six feet square and twenty-six deep. It is chiefly used by washermen. It had thirteen feet of water in December 1883. The Jokni well to the north of the town takes its name from a Jekni or female spirit who haunts it. Thirty years ago it looked more like a pit than a well. Since then the Municipality have built stone steps on the cast and south sides and the townspeople use its water for drinking. It is sixty-two feet deep, and has an area of 481 square yards on the top and about 150 square yards at the bottom. In December 1883 it had twenty-six feet of water. Nuchambli well is to the south-west of the town near the village of Hosyellapur. It is called after a mixture of jvari and ragi, called nuchambli or millet gruel which was given to the labourers who dug it in a senson of great drought about 120 years ago.1 The well looked like a large pit till 1832 when it was repaired by public subscription. Steps have been built towards the north and east sides of the well, and its water is used for drinking. It occupies an area of 523 square yards, and is thirty feet deep. December 1883 it contained seventeen feet of water. Rayar Bhavi, on the south-east of the town near the Navlur gate was built by Vyásráy a Vaishnav Mádhva pontiss. It covers an area of about 500 square yards and is lined with deep steps from the surface to the water's edge. It had seventeen feet of water in December 1883. For want of cleaning and the surface of the water in December 1883. 1 883. For want of cleaning and repairs the water is dirty and is willed only for washing. The temple of Rayar Hanuman stands on will northern brink of this well. Three wells were built between an 835 and 1860 by Ráo Sáhob Shrinivásráo Hanumant now a retired ke byernment pleader. One of the wells built about 1835 is in the hold District Judge's office. Its water is excellent and is generally Mised. The other built about 1812 is on the Dharwar-Hubli road near a garden planted by Mr. Shrinivas. This well covers an area of about twenty-five square yards and is forty-eight feet deep with steps on the southern side. The well is now chiefly used by wayfarers. The third well was sunk by Mr. Shrinivas in 1861-62 in the present District Judge's office. The Udpiráyar well on the south-west of the town was built about 1780, by one Udpiráo an officer under the Peshwa's governor or sarsubhedar. It covers an area of thirty square yards and is about thirty feet deep with steps on the west side. Its water is used by the people of the neighbourhood. A temple of Hanuman, built by Satya Bodh Svami, a great pontiff of the principal sect of the Madhya Brahmans about 1780, stands on the north side of this well. Venkatráo Bahádur's well, to

Chapter XIV.
Places.
DHÁRWÁR.
Wells.

¹ Nucleu is juint boiled in water and made into a hard mass, and amble is the grael of ragi flour.

Chapter XIV.
Places.
Duknwkr.
Wells.

the south-west of the town was begun by the late Ráo Bahádur Venkatráo Subáji principal sadar amin or native judge of Dhárwár, after a succession of three years of droughtending in 1840. Mr. Venkatrao died in 1846, and his son Ráo Bahádur Tirmalráo Inámdár, formerly a Judge of the Small Cause Court at Dharwar and Hubli and now a pensioner and a honorary magistrate of the first class, completed it in 1847 at a great cost. The Bombay Government expressed themselves gratified at the public-spirited liberality shown by Mr. Venkatráo Subáji in making the well. In 1849 they conforred on his son Ráo Bahádur Tirmalráo forty acres of rent-free land in perpetuity as a reward for completing and for maintaining the well. The well is used by all classes of people and did not fail even in the great drought of 1874, when almost all other wells were dry, The well has an area of about 610 square yards and is seventy-nine feet deep. On the eastern side five cut stone steps lead from the surface to the water's edge. In December 1883 the water in the well was thirty-five feet deep. Kopramma's well on the south-east of the town, and near the Navlur gate, was built by the same Ráo Bahádur Tirmalráo in 1880, at a cost of about £140 (Rs. 1400) and named after his late mother Kopramma. The well is circular, about six feet in diameter and forty-seven feet deep, and is very substantial being built from top to bottom jentirely with dry plate stones. The water of the well is sweet and is used by the people of the neighbourhood, by travellers, and by market people on market days. It had twenty feet of water in December 1883. Two large circular wells are within the jail limits, one in the juil itself, the other in front of the jail gate. The water of both wells is sweet and is used by the inmates of the jail for drinking and washing as well as for watering the jail garden where European and native vegetables are grown. The finer vegetables are sold for the benefit of Government, and the country vegetables are used by the prisoners. The wells are each about twenty-five feet if diameter, and about eighty-eight feet deep. In December 1884 they had sixteen feet of water.

Markets.

Ontside of the town on the north, and between it and the forto are the Robertson Fruit and Vegetable Markets. They are mod convenient and spacious and next to the new market at Hubli, are among one of the finest up-country markets in the Bombay presidency. They include a quadrangular building with a corrugated iron roof containing on each side of the square twenty stalls back to back. Each of the forty stalls on the southern and western sides is provided with an enclosed brick wall covered with a wooden lid, in which the dealers keep their goods at night. The remaining forty stalls on the northorn and eastern sides have no such enclosures. Outside the quadrangle are three blocks of shops one on the northwestern, another on the south-western, and the third on the southeastern sides, each block containing fourteen shops or rows, with a stall seven feet broad, and a veranda in front also seven feet broad. The space on the north-eastern side of the quadrangle is still empty. The right to trade in this vacant space is sold every year to the highest bidder. Besides these, two other blocks of shops one on each side of the public road lead from the market into the

town, each block containing fifteen shops or rows, and a veranda in front of the same breadth as the shop. The present total number . of stalls is eighty, and of shops seventy-two, and the total building cost to the municipality has been £2775 (Rs. 27,750). privilege of occupying and trading in each of the eighty stalls and seventy-two shops and on each of the separate portions of empty ground to the north-east of the quadrangular building, is sold by public auction every year to the highest bidder. In 1883-84 the rents amounted to £193 (Rs. 1937). No shop tax is levied on these stalls, shops, or empty plots, as they form municipal property. average yearly cost of repairing the stalls and shops is about £20 (Rs. 200). The remaining twenty shops were sold to different persons, who occupy and trade in them, paying the municipality a yearly shop tax of £6 4s. (Rs. 62). Mutton and beef markets were built by the municipality in 1881. The mutton market is a square building with thirty-four stalls and cost £92 8s. (Rs. 921). The beef market is a square building with twelve stalls and cost £19 (Rs. 492). There are two slaughter houses one with a paved floor for slaughtering sheep and goats, and the other for slaughtering cows and bullocks. The old market within the town of Dharwar consists of rows of shops on each side of two long streets known as the north and south Mangalvár Piati-voni and the east and west street known as Javlivoni, crossing each other at right angles. Each shop consists of a room with a veranda in front and a store room Articles for sale are kept in baskets and shown in the veranda.

The only industries in the town are the weaving of coarse woollen blankets and coarse cotton cloth. The jail manufactures are carpets, towels, table cloths, quilts, cane chairs, and boxes. The Government cotton gin factory, which used to repair cotton gins and do

discollaneous iron work, was closed in July 1883. Dharwar has thirteen large Hindu temples and three Muhamplan mosques. The temples, which are mostly plain and modern in le three of Hanuman, two each of Durgadevi, Natsinh, Pandurang, ke d Venkatesh, and small shrines of Dyamava and Raghavendra he kimi. The oldest is Rayar or Vyasray Hanuman's temple near base Navlur gate. It is said to be one of 360 temples which were Built throughout the Vijaynagar territory about A.D. 1510 in honour Vyásráy who built the temples was a Mádhav of Hanuman.1 pontiff, who is said to have managed the country for twelve years during the minority of a Vijaynagar king. The temple is held in much reverence. The other two temples are Mudi Hanuman's shrine near the old gate of that name, and Hanuman's shrine near the reservoir built about 1790 by Satya Bodh Svámi another great Madhav pontiff. Of the two Durgadovi shrines one is in the fort and the other in the town. Of the Narsiuh temples one is in the town and the other at Madihall within a mile of Dharwar; the latter was built by the late diwan Rao Bahadur Shrinivasrao

Chapter XIV. Places.

Dhárwár. Markets.

Industries.

Temples.

¹ This date falls in the reign of the famous Krishna Ray (1508-1512) the ninth king of Vij tynagar.

Chapter XIV. Places.

Duanwan.
Temples.

about 1832. Of the two temples of Pándurang one in the fort was built by the Peshwa's last commandant Bápuji Sindia (a.p. 1800), and the other in the town was built about 1820 by Ramanna Náik a rich Dhárwár morchant. Dyamava's and Rághavendra Svámi's are two minor shrines, the latter built by a Dhárwár priest about 1830. There is also a small temple of Tripurling near the 262nd mile-stone where the Dhárwár road branches from the Hubli-Belgaum road. It is an old and substantial building of stone and mortar and has lately been repaired and whitewashed. There is also a Jain temple in Dhárwár, and Lingáyat temples of Virbhadra and Ulvi Basappa.

Mosques.

Of three chief mosques, two the Jama and the Bara Imam's are in the town, and one Hatel Patcha's is in the fort. The panjas or iron hands which are worshipped in Hatel Patcha's mosque are said to have been brought from Bidar in the Nizam's dominions.

Maths.

Within municipal limits are twenty-five large and small Lingáyat monasteries or maths built by different Lingáyats at different times.\(^1\) Six of these monasteries are of special importance, Hiro's, Dodya's, Charanti's, Huchya's, Javatiavara's, and Karibasya's. These were built by different Lingáyat merchants at different times and are used only by Lingáyat priests. The Lingáyat laity never live in these monasteries.\(^2\)

Chapel.

Dharwar has a German mission chapel and two Roman Catholic chapels. The German Mission chapel is seventy-six feet long by forty-two broad and twenty-four high and has a forty-feet high tower. It was built in 1844-45 and dedicated on the 14th of December 1845. The service by the missionaries is in Kanarese and once in English on Sundays. Attached to the chapel is a small cemetery in which several missionaries and their wives and children have been buried.

Travellers' Bungalow. There is one travellers' bungalow and four rest-houses withir municipal limits. One of the rest-houses was built by the municipality, and the other three by private persons one of whom Muhammadan enjoys a grant of rent-free land from Government for the repair of his rest-house. The best of the three rest-house is that built by Ráo Bahádur Tirmalráo Venkatesh near his father big well at a cost of £500 (Rs. 5000). The rest house is commoused by travellers, and, on important occasions, by townspeor for holding caste dinners and other entertainments.

European Grave Yard. The European grave-yard is a little to the south-east of the fort. It has a tablet to the nephew of Sir Thomas Munro with this inscription:

'To the memory of John Collins Munro Esquire of the Madras Civil Service who being present with the force assembled for the reduction of Kittur, was unfortunately carried by his ardent temper to share in the storm of the enemies works on the 3rd of December 1824, when he received a mortal wound, of which he

¹ To consecrate a Lingdyat monastery a priest is brought into the new building. His feet are washed and the floor is sprinkled with the water. Four lings are consecrated and one is buried under each corner of the building with prayers. A few priests are fed and the building is fit for use as a monastery.

2 Details are given above pp. 108-110.

died on the 11th of December 1821, at the early age of 26 years This monument was erected by his uncle, Major General Sir Thomas Munro.

There are tablets also to Captain Black and Lieutenants Sewell and Dighton of the Madras Horse Artillery,

"Who lost their lives in gallantly attempting to quell the insurrection at Kittur, on the 23rd of October 1824. This monument was erected by their three friends who witnessed their devoted conduct at that unfortunate affair."

To the south-east of the town near the Navlur gate is a monument raised in memory of the late Ráo Bahádur Venkatráo Subáji Principal Sadar Amin of Dhárwár who died in 1846.

The monument of most historical interest at Dharwar is an obelisk about sixty yards from the travellers' bungalow. The obelisk which is twenty-eight feet high, was built in momory of Mr. Thackeray and Mr. Munro two officers in the civil employ of Government who lost their lives in the Kittur insurrection in 1824. The obelisk has inscriptions in Persian on the south face, in Kanarese on the west, in Sanskrit on the north face, and in English

"Erected by their friends to the memory of St. John Thackeray, Daquire, Principal Collector and Political Agent, Southern Maratha Doab killed in the insurrection at Kittur, October 23rd 1824, and of John Collins Munro, Esquire, Sub-Collector who died December 11th of a wound received at the reduction of that place."

on the east face. The English inscription is

The civil station occupies the extreme west of the town and the fort. It is bounded on the north and east by the road from the town to the village of Malapur and by the open country on the south and west. The station is about a mile and a quarter from east to west and a mile from north to south. It is crossed by broad streets shaded by beautiful avenues of trees. Most of the bungalows, of which there are about eighty outside of the fort, are substantial buildings in large enclosures each with a well, and most with flower, vegetable, and fruit gardens. The bungalows in the fort are smaller, are not so strongly built, and have no wells and smaller gardens. According to its size and position the cost of a bungalow varies from about £30 to about £2000 (Rs. 300 to Rs. 20,000). Porty-six of these bungalows yield yearly rents varying from £3 to £100 (Rs. 30 - Rs. 1000). They pay a yearly municipal house tax of Gs. to 12s. (Rs. 3 - 6). The remaining thirty-four bungalows are either public offices or churches, yield no rent, and pay no municipal tax. The Collector's office lies at the extreme south of the station and the Government treasury is kept there. The Collector's residence is close to his office. To the north of the Collector's garden are the training college and the high school. To the west is the executive engineer's office, and to the north the revenue survey office, and the residence of the Judge. Towards the east of the Judge's residence is Thackerny and Munro's obelisk and the European church. To the east and south-east of these are the new District Court, post office, and a Roman Chapter XIV. Places.

Duknwan. European Grave Yard.

Civil Station.

Places.

Duknwan.

Civil Station.

Catholic chapel. The rest of the civil station is filled with bungalows occupied by other officers and gentlemen. Three of the bungalows are used by Parsi shopkeepers. At the eastern gate of the Collector's garden is the first class subordinate judge's court, and to the south are other bungalows and the chapel and residence of the German missionaries. At the extreme northwest corner of the civil station are the lunatic asylum and the jail. The jail is surrounded by a high quadrangular wall with its chief entrance on the north. Outside the building are working sheds for the prisoners and there, with the gardens, are surrounded by a strong fence of prickly pear, a deep ditch, and for some distance, a dry stone wall. Up to 1882, the Civil hospital was in the same enclosure as the lumitic asylum. It has since been moved into a new building in the fort, which forms the eastern part of the civil station. Inside the fort are several houses of Europeans, Eurasians, and others, the new Civil hospital and the station library. Muhammadans, one of whom is the Káji of Dhárwar town and a few native servants also live in the fort. The chief Muhammadan mosque called the Hatel Patcha's Dargha, the Hindu temples of Durgadevi, Vithoba, Hanuman, and Margamma, and the mansion of Bápuji Sindia (1800) the last Peshwa's commandant are also within the fort.

Military Cantonment. The Military Cantonment, in the open country about a mile and a half north-west of Dhárwár, and on the west of the Belgaum road, occupies an area of 331 acres, just enough to accommodate one Native Regiment. The cantonment is open to the prevailing breeze and being built on a slope has a good natural drainage. In 1872 it had a military population of 1634 of whom 661 were fighting men and 973 were followers. In 1876 of a total of 1655, 720 were fighting men and 935 were followers. In December 1883 there was a total strength of 506, of whom 310 were fighting men and 196 followers.

Mailargudda IIdl About two miles south of Dhárwar is the Mailargudda hill on whose top is a small square stone temple facing east built in the Jain style. It has round pillars and square massive stone beams, with a somewhat plain ceiling. It is not known who built the temple but on the front pillars are two Porsian inscriptions. The inscription on the (visitor's) right pillar is lost; the left pillar inscription runs:

In the reign of Muhammad A'dilsha'h king of Bija'pur this building acquired by the favour of God, was converted into a mosque by Muhammad Khan Ulia Bar Hava'da'r of the fort of Dha'rwa'r, for the use of all Muhammadans to offer up prayer without fear, in the year Rhide Samanin va Allaf 1081 (that is A.D. 1670).

When the Maráthás took Dhárwár in 1753 this building was turned into a Hindu temple and dedicated to the god Mailarling. Its chief worshippers are Dhárwár Komtis.

History.

Dhárwár is not an old town. In a legendary account of the old temple of Someshvar two and a half miles south of Dhárwár, Navlar and other places in the neighbourhood are said to be noticed but there is no mention of Dhárwár. The local belief is that the Dhárwár fort was built in 1403 and called after its builder Dhárráv¹ an officer of the Vijaynagar king Rám Rája.2 The first certain notice of Dhárwár is in 1573 when the fifth Bijápur king Ali Adil Sháh (1557-1579) is mentioned as marching on Dharwar one of the strongest forts in the Karnátak. It was then held by an officer of the late Ram Raja of Vijaynagar who had assumed practical independence. The fort fell after a siege of six months and the surrounding country was annexed to Bijápur.3 In 1660 one of the Dhárwár fort gates was re-built with well cut granite stones. Over this gateway is a Persian inscription dated A.D. 1660 (II. 1071) giving the name of one Abdul Gaffar as the commandant of the fort under Bijápur. In 1662 lands were granted to the Káji of Dhárwár by the Bijápur king and the Káji's descendants still hold that grant dated H. 1078 that is a.d. 1662. An inscription dated 1670 in the temple on the Mailarling hill two miles south of Dhárwár is another local remnant of Bijápur rule.⁵ In 1673 Abdul Karim Khán, the ancestor of the present Nawáb of Sávanur was appointed governor of the Bijápur district or sarkár of Bankápur with sixteen sub-divisions or parganás. The chief of these sub-divisions were Nasratabad or Dharwar and Gadag. In 1674 Shivaji fortified Nargund thirty miles north-east of Dhárwár and took Dhárwár.7 In 1685 Sultán Muazzim, Aurangzeb's son, marched, in the name of the Delhi emperor, to regain the southwest parts of the Bijápur kingdom which Shiváji had overrun. He took Hubli and Dhárwár, a place of respectability and strength, and placed garrisons in them.⁸ During the sixty-eight years of Moghal supremacy, from 1685 to 1753, Dhárwár was held by four commandants sent from Delhi, and acting under the orders of the Moghal Governor at Bijápur.⁹ The last commandant surrendered Dhárwár in 1753 to the third Peshwa Báláji: Bájiráo (1740-1761) who presented the commandant with £4000 (Rs. 40,000) as arrears

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History.

Caldwell's Tinnevelly, 46.

Bliggs' Ferishta, III. 135
Ando Bahádur Tirmalráv.

Grme's Historical Fragments, 286; Stokes' Belgaum, 42.

Stokes' Bolgaum, 42; Bom. Gov. Sel. CXIII. 173.

Grant Duff's Maráthás, 148; Stokes' Belgaum, 43; Orme's Historical Fragments, 144; Moor's Narrative of Captain Little's Detachment, 42.

The Grant Duff's Maráthás, 148; Stokes' Belgaum, 43; Orme's Historical Fragments, 144; Moor's Narrative of Captain Little's Detachment, 42.

It is said that Dharrav meant at first to fortify Navlur two miles south-east of

¹It is said that Dhárráv meant at first to fortify Navlur two miles south-east of Dhárwár and began the work, traces of which remain. The widespread legend that the founder when lunting started a hare which turned on and killed his dogs is told of Dhárwár. It seems probable that Dhárráv, after making a beginning at Navlur, found that the neighbouring hills would give cover to an enemy and accordingly chose the more open site of Dhárwár.

2 This date is probably correct as it has been handed down according to four different chronological systems, Shak 1335 Subhanu Samvatsar, Sursan Arab Miyu Sumani SO4, Hijri 806 and Fasil 513. The name of the king appears to be wrong as the Vijaynagar king in 1403 was Deva Ráya Vijaya Ráya Vijaya Bukka or Bukka II. who ruled from 1401 to 1451. The only Rám in the Vijaynagar list is the regent of the eleventh chief Sadáshiv (1542-1573) who usurped the throne from 1542 to 1565. Caldwell's Timevelly. 46.

⁹ The first Moghal commandant of Dharwar was Mirza Saifulla valad Muhammad Murda from 1685 to 1699, the second commandant was Alaf Khan Kallandukhan from 1700 to 1718, the third was Muhammad Nasrullskhan from 1719 to 1733, and the fourth was a Hindu Prithvising son of Bhagirathsing from 1734 to 1753. During the rule of the second and third commandants the peace of the district was twice disturbed once by the Nawab of Savanur, and once by a rising of desdis and palyars. In both cases the insurgents proved too strong for the Government and had to be bought off. Rao Bahadur Tirmaliav.

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of pay due to the garrison. In 1764, as the Nawab of Savanur refused to separate from the Maráthás, Haidar marched to Sávanur and reduced the Nawab to submission, while his general Fazl Ullah Khan took Dharwar and overran the country as far north as the Krishna! On the approach of Mádhavráv Peshwa's (1761-1772) army of 30,000 horse and as many foot, Fazl Ullah had to fall back on Haidar's army leaving a strong garrison at Dhárwár.2 After Haidar's defeat at Annavatti in Maisur twenty-five miles south of Bankapur Madhay. ráy laid siege to Dhárwár which capitulated after a breach had been made.4 In 1776 Haidar left a chosen body of troops in Bankapur to watch and, as far as possible, prevent supplies passing to the Dharwar garrison which had not been reduced. In 1778 Haidar took Dharwar after a protracted siege. In 1784, Tipu, then in the height of his glory, compelled the Maráthás to cede Dhárwár with other forts and districts, he agreeing to pay a tribute for them. In 1788 Dhárwár was besieged and taken by the Maráthás! In a Marátha revenue statement prepared about 1789 Dhárwár or Nasratabad appears as a pargana or sub-division of the Bankapur sarkár with a yearly revenue of £12,013 (Rs. 1,20,130).8 In September 1790 as part of the joint attack of the English and Maráthás on Tipu of Maisur, during the Third Maisur War (1790-1792), a Marátha force of about 20,000 horse and 10,000 foot under Parshurám Bhás, a man rather under the common size about fifty years old not well looking though with an air of interest and much good nature," with an English detachment of 1600 bayonets and three companies of artillery commanded by Captain Little appeared before Dhárwar which was held by Badr-al-Zamán Khán¹⁰ one of Tipu's most trusted generals, 11 with a garrison of seven thousand regulars and three thousand militia armed with matchlocks and swords. The army took up its ground near Narendra village about three miles north-west of Dhárwár. On the 18th of September the Maráthás and English advanced against the fort but were forced to withdraw with considerable loss. After this for about six weeks the Maráthás contented themselves with dragging guns to a rising ground about 2000 yards from the fort, firing during the day, and dragging them back at night. On the 30th of October the assailants moved from the north to the south of the fort and the Euglish detachment attacked a body of the enemy who were posted outside of the walls. The enemy were driven from the post within the walls of the town with the loss of three guns. The defendants' loss was considerable. Of the English ten were killed and fifty-nine wounded. After this success until the 13th of

¹ Grant Duff's Maráthás, 330.

Grant Duff's Maráthas, 330-332; Wilks' South of India, I. 461-464.

See above p. 412.

Grant Duff's Maráthas, 331.

See Boots of India, II. 186; Grant Duff's Maráthás, 401.
 Wilks' South of India, II. 186; Grant Duff's Maráthás, 401.
 Hamilton's Description of Hindustan, II. 238. Rice's Mysore I. 282, 284.
 Waring's Maráthás, 246. Moor's Narrative, 17.

¹⁰ Badra-Lamán is described as a man of fifty-five of good appearance and middlo stature with a handsome beard dressed very neatly in plain white. Moor's Narrative, 37.

11 The details of the English detachment were the 8th Battalion of Native Infanty under Capt. Littleand the 11th Battalion under Capt. Alex. Macdonald of 800 bayonets each, and one company of European and two companies of Native Artillery with sixpounder field pieces. Moor's Narrative, 1.

December nothing was done beyond daily dragging guns to the high

ground to the north of the town and firing at the walls. On the 13th of December a smart attack was made on the town and the enemy were driven out of it. The English detachment drove the enemy out and the Maráthás followed and burnt and plundered the greater part of the town and then retired. The English lost sixty-two killed and wounded and the Maráthás 150 killed and several hundreds wounded. When the Maráthás returned the defendants again took possession of the town but were driven out by the Bhau's infantry on the 18th, who plundered the town so completely that not a piece of wood was left standing. As the siege made such poor progress an additional force under Colonel Frederick was sent from Bombay on the 19th of November and reached Dhárwár by Sangameshwar and the Ámba Pass on the 29th of December 1790. On that day the attacking force had a slight success taking a battery about 200 yards to the south-east of the fort. On the 2nd of January 1791 there was a formal meeting between Colonel Frederick and the Bhau at a temple on Parshurám's hill a mile to the south of the fort. During the next ten days the Maráthás continued to batter the fort but without doing much harm. The English meanwhile were preparing a battery and received three good guns from the Maráthás a twenty-two, a twenty-four, and a thirty-six pounder. The battery opened fire on the 14h and continued till the 16th, making a breach, but the defendants were able to repair it. The ammunition then failed and little more was done till the 28th. The battery again fired at a fresh part of the wall and caused a breach which it was determined to storm. The English detachment was strengthened by the corps of Mr. Yvon's, an English gentleman in the Peshwa's service, about 300 strong fifty of them being Europeans of all nations and the rest natives. The storming party moved out at four in the morning of the seventh. But as the Maráthás failed to make a separate attack the whole of the defendant's fire was directed against the storming party and the attack failed. During the next ten days little progress was made. In spite of the length of time the Maráthás had been firing there was little appearance of a breach. With twenty guns the Maráthás could not approach and breach Dhárwár in seven years. Places.

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estimated at 3000. Mr. Moor gives the following details of the fort. The fort was an irregular circle. The entrance was on the

whom one hundred were Europeans.

The Marátha loss was

The English detachment were unable to be of much assistance as the Maráthas failed to keep them supplied with ammunition. On the 13th of March Colonel Frederick died. The siege was continued till the end of March when the defendants made offers to capitulate and a truce was concluded. Negotiations were completed, the garrison marched out of the fort on the third of April, and the fort was finally handed over on the seventh. During the siege from casualties and desertions the garrison had been reduced from 10,000 to 3000. The loss of the English detachment was 500 killed and wounded of

¹ The details were, the 2nd Bombay Regiment, the 9th battalion of Native Infantry with European Artillery and lascars and a light field piece. Moor's Narrative, 7-8.

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eastern side through three pretty strong gates the middle of which was very handsome. The gateway was defended by a battery of three guns. The outer ditch was twenty to twenty-five feet deep and twenty-five to thirty-five feet wide with a stone facing in places. The curtain of the outer wall was thick and strong and the rampart though too narrow had guns mounted on it. Behind the rampart was a second ditch twenty-five feet wide and deep. The inner rampart and curtain were much the same as the outer. In both curtains were many towers mounting twenty-two guns two mortans and a number of fixed wall pieces called jingals. The area inside was small and the whole most forlorn. The powder magazine was underground in the rear of the cavalier tower. The commandant's residence and his office were near the centre of the fort and were much battered. There were no handsome or convenient buildings. It was very dirty as so many people had been so long living in it. There were several guns of iron bars hooped round and beaten into shape which were known as Malabár guns.1 The town which stretched from about 250 yards to the south and east of the fort was enclosed by a weak wall in bad repair and a shallow ditch. The wall was square each face a little less than half a mile. Part of it was strengthened by a thick hedge. Before the sack of the town the space inside the wall had been well filled with houses though few or none of them had been handsome. A stone mosque in the middle of the town had escaped without much damage.2

In October 1800 Colonel Wellesley, afterwards Duke of Wellington, expressed his opinion that Dhárwar could be taken by a coupde-main, and he drew up a plan of attack on the south-west side.3 Some officers of Colonel Wellesley's army rode to Dharwar, and one party was received in the fort by Bapuji Sindia the commandant. Another day Colonel Wellesloy rode near the fort and examined The commandant remonstrated, and at the Peshwa's request Colonel Palmer, the British Resident at Poona, wrote to Colonel Wellesley for an explanation.⁵ In 1803 the same commandant invited Colonel Wellesley to an entertainment in the fort and to his surprise the invitation was accepted. Bápuji afterwards expressed astonishment that he had allowed Colonel Wellesley to leave the fort, adding 'Am I not a Maratha.' Bápuji Sindia came to pay his respects to Bájiráv, who was then

Ed.), 239; Mrs. Guthrie's Western India, 319-320.

¹ Moor's Narrative, 1-41. ² Moor's Narrative, 41.

Aloor's Narrative, 1-41.

Supplementary Despatches (India, 1797-1805), II. 198. In one despatch (dated Habli 9th October 1800) Colonel Wellesley mentions Dhárwár with Hubli and Aunigeri as places famous for cloth. Ditto, 203.

To calm the commandant's suspicious Colonel Wellesley gave him to understand that if he had wished to know anything about Dhárwár he would have referred to his own plan of the place, or would have made inquiry of one of the British officers who had taken Dhárwár for the Marithás of whom there were several in his carm. He reminded the commandant that except Dhárwár all the forts in in his camp. He reminded the commandant that, except Dharwar, all the forts in the Maratha territory had passed through his hands, and that after getting hold of them he never kept them a moment but gave them over to their owners, as became a faithful ally. Supplementary Despatches, II. 280-281.

Supplementary Despatches, II, 280-282.
Despatches (Gurwood's Edition), II. 332; Murray's Handbook of Bombay (2nd

on his way to the Madras Karnatak. He was told to give up the fort to Trimbakji Denglia. Bápuji answered 'If your Highness will send a gentleman to relieve me in the command, or if you will send my clerk in your own name, I will deliver the keys to him, but I will never give over the fort to such a person as Trimbakji Denglia.' For this speech as soon as he left the Peshwa's tent Bápuji was seized, bound and tortured by Trimbakji until a promise of surrender was extorted. Bápuji gave the keys to his clork, a Bráhman on whom he could rely, and the clerk, accompanied by a body of troops, started for Dhárwar. drew near the fort the clerk asked leave to go in advance. As soon as he entered the fort he closed all the gates and opened such a fire that Trimbakji and his men were forced to retire. The faithful clerk did not surrender until an order was obtained from his imprisoned master through the interposition of Bapu Gokhle.1 On the 13th of June 1817 under the treaty of Poona the Peshwa among other cessions agreed to hand to the British Dhárwár and Kushgal about fifteen miles south of Dhárwár and other districts south of the Varda.9 take possession of this territory, General, afterwards Sir, Thomas Munro marched to Dharwar. Major Newall who was sent advance at the head of a battalion of Native Infantry managed matters with such address that though in a state of mutiny, he prevailed on the garrison to yield. In July 1817 when General Munro and his party arrived they found the fort in the hands of the Company's troops.3 A battalion of Native Infantry and two six-pounder field pieces were left under the command of Major Newall to hold Dharwar, Kushgal, and Ranebennur.4 During the Third Marátha War, Dhárwár was taken on the 15th of June 1818 by Lieutenant-Colonel Newall with the second battalion of the Fourth Regiment, and all the heavy guns and ordnance stores were thrown into the fort. In 1837 Dharwar was the scene of such violent fends between the Brahmans and Lingayats that Government were forced to interfere.6 During the 1857 Mutinies, on account of the disaffection of the surrounding chiefs, especially the chiefs of Nargund and Mundargi, in case it might fall into the hands of mutineers, it was thought advisable to breach Dharwar fort. Since 1833 from various causes Dhárwár has lost its importance as a place of trade. The opening of a station on the Marmagoa-Belári line, 150 miles from Marmagao and 142 miles north-west of Belári, will probably increase the trade of Dhárwár. Still Hubli will remain the commercial centre of the district.

Dhundshi, on the Kanara frontier, six miles north-west of Shiggnon, is an important market town in the Bankapur sub-division with in 1881 a population of 2374. It has a large number of shops, and at the weekly Thursday market, betelnuts, black pepper, cardamoms, chillies, cocoa-kernels, molasses, rice, salt, sugar, and

tobacco are sold in large quantities.

1 Grant Duff's Maráthas, 623 - 624.

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DHUNDSHI.

Gleig's Life of Munro, I. 460.
 Blacker's Marátha War, 314.

² Grant Duff's Maráthás, 635.

<sup>Blacker's Marátha War, 59-60.
Murray's Handbook, 240.</sup>

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Dhundshi, on the Kánára frontier, six miles north-west of Shiggaon, is an important market town in the Baukapur sub-division with in 1881 a population of 2374. It has a large number of shops, and at the weekly Thursday market, beteinuts, black pepper, cardamoms, chillies, cocoa-kernels, melasses, rice, salt, sagar, and

tobacco are sold in large quantities.

1 Grant Duff's Marathas, 623 - 624.

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DRUNDERI.

³ Gleig's Life of Munro, 1. 460.

Blacker's Marátha War, 314.

² Grant Duff's Maráthás, 635.

⁴ Blacker's Maratha War, 59-60.

⁶ Murray's Handbook, 240.

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Didgur, about fifteen miles south-west of Karajgi, with in 1882 a population of 598, has a temple of Hanuman with six inscriptions. Two other inscriptions occur one in the yard of one Pujar Bandiya, and the other on the waste-weir of the village pond.

EDLABAD.

Edlabad is an uninhabited village about four miles west of Shiggaon, the head-quarters of the Bankapur sub-division. Within its boundary is a holy well called Gangabhavi or the Ganges Well where a yearly fair attended by about 2000 persons is held in January. The well is thickly shaded by mangoes in a pleasant spot surrounded by woody hillocks. A small brook rises from the well and flows down the valley. On the edge of the well is a domed stone and mortar temple of Kameshvar with a self-made or svayambhu ling. To the north-west of the well is a cave said to have been used as a hermitage by the sage Janhu, who used to drink the well dry, and let it trickle from his ear. The three holes from which the well water cozed are still shown on the north side of the well. The temple has a Government grant of £9 6s. (Rs. 93) in land and £2 4s. (Rs. 22) in cash, enjoyed by a ministrant who is charged with the worship and the lighting of the temple. Pilgrims to the number of 2000 mostly Brahmans, Vaishyas, Sonars, and Lingáyats, come from all parts of Dhárwár, from Bádámi and Bágalkot in South Bijápur, and from Mundgod and Sirsi in Kánara. The fair is held for one day on the 13th of January, the day following the sun's passage into Capricornus that is the Makarsankránt. Pilgrims bathe in the well and worship Kámeshvar. The bath and worship are said to be an unfailing cure for fever. The fair is not of any trading importance, the only things sold are plantains and cocoanuts which pilgrims buy to offer to the god.

GADAG,

Gadag, north latitude 15° 96' and east longitude 75° 43' usually called Gadag-Bettigeri from the village of that name a mile to the east, is a municipal town, the head-quarters of the Gadag subdivision with in 1881 a population of 17,000. Gadag is a noted cotton mart and its trading importance will greatly increase when it is the junction of the South Deccan or Marmagao-Belari and the East Deccan or Hotgi-Gadag railways. The 1872 census returns showed within municipal limits a total population of 19,035, of whom 15,604 were Hindus, 8349 Musalmans, and eighty-two Christians. The 1881 census showed a population of 17,000 or a decrease of 2034. Of these 13,493 were Hindus, 3176 Musalmans, and 331 Christians, giving a density of ninety-one to the square acre on 178 acres the total municipal area. The average cotton trade at Gadag, which is carried on by nine large traders with capitals of 500 to £20,000 (Rs. 5000-Rs. 2,00,000), is worth upwards of £50,000 (Rs. 5,00,000) a year. Gadag has two steam cotton presses owned by the West Patent Press Company and Messrs. Framji and Company and a hand or half press belonging to Messrs. Robertson. Brothers and Company. There is also a Government Sawgin factory. Gadag is also noted for its fine deep

¹ The details were: In Gadag Hindus 8200, Musalmáns 2046, and Chirstians seven, total 10,319; and in Bettigeri, Hindus 7338, Musalmáns 1303, and Christians seventy-five, total 8716.

coloured robes or súdis. Weekly markets are held at Gadag and at Bettigeri on Saturdays when cloth and rice are chiefly sold.

Besides the sub-divisional revenue and police offices Gadag has a municipality, a sub-judge's court, post and telegraph offices, a dispensary, a ruined fort, two temples, and twenty inscriptions. There is also a branch of the Basel German Mission at Bettigeri and eight schools. The municipality was established in 1859. In 1882 it had an income of £1548 and an expenditure of £1268. The income is chiefly from octroi and miscollaneous direct taxes. dispensary was opened in 1864, and treated in 1882-83 forty-six in-patients and 13,703 out-patients at a cost of £343 8. (Rs. 3434) or 6d. (4 as.) a head. In 1812 the fort was described as a small rectangular work with a mud and stone wall about eighteen feet high and a dry ditch and glacis round part of the works. The committee of inspection recommended that a company of regular troops with fifty or sixty irregulars should be stationed at Gadag to he withdrawn as the country grew more settled. In 1750 Gadag fort is described as a well guarded fort of stone and mortar on slightly raised ground. The height of the wall varied. The old wall was 6! yards high; the new wall was half a yard less. The inner circuit was 1534 yards. It had twenty-one towers. Inside was a large reservoir of rain water and there were several wells some with and some without steps.1

Gadage has the remains of some of the most richly carved temples in the Dhárwar district. The chief temples are of Trikuteshvar, Sarasvati, Náráyan, Someshvar, and Rámeshvar. The temples of Trikuteshvar and Sarasvati are in one large court. Trikuteshvar's is the principal and occupies the centre; and Sarasvati's is built on the south side of the court at right angles to and almost touching Trikuteshvar's central hall. Perhaps of all Dharwar buildings the little temple of Sarasvati takes the first place for delicacy and beauty The richness and grace of some of its columns are not surpassed. The whole temple, even to the figure of Sarasvati in the shrine, has been wrought with immense care and elaboration. The building consists of an open hall or mandap and a shrine, which has long lost its spire. As in all Chalukyan temples the walls are broken into vertical projecting and recessed panels, which with the deep overhanging cornico and other horizontal mouldings, allows of a pleasing balance of light and shade on the faces of the building. The panels are ornamented with pairs of little pilasters surmounted by miniature spires throwing numerous light shadows which harmonise with the leading lights and shades and unite them in one well balanced whole. The hall or mandap is surrounded by a low plinth wall whose outer face is minutely and lavishly carved. It is a repetition of little pilasters separating recessed niches in each of which is a tiny female figure. Along the edge of the plinth a low parapet wall slopes outwards and forms a back on the upper surface of the plinth which may be used as a seat. The outer face of this parapet is adorned with little groups of pilasters with circular

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Fort.

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Sarasvatı.

2 Contributed by Dr. J. Burgess.

^{&#}x27;l'iessenthaler's Description Historique et Geographique de l' Inde, I. 500.

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medallions between them. From the top of the plinth rise the pillars which support the eaves round the hall. The entrance is between the two front pillars. Fourteen pillars round the hall support the eaves and four other pillars standing in the floor support the central dome. The four pillars at the entrance, two on either side, and the four supporting the dome are exquisitely worked. The first pair in front have a band of pure and elegant diaper pattern. It is of lozenge shaped flowers separated by very deep clear cut lines. It occurs nowhere but on a small portion of the upper parts of the shafts of these pillars and strikes the visitor as an exceedingly choice bit of design, so effective and so pretty, that more of it would have been welcome. The next pair of pillars are like the first pair of square shafts with notched corners, but are totally unlike the former in their details. The carving on these two pillars is perhaps the most delicate stone carving in the Bombay Presidency. The whole shaft is a series of horizontal bands of carving, each band of little pilasters separated by nichos holding figures in high relief. Each little pilaster is complete with all its vertical and horizontal mouldings, bases, and capitals. The pilasters on the lower band are surmounted by little ornamental spires. The figures are most delicately chiselled. Though but two to three inches high they stand in almost full relief, connected with the pillar only by a small portion of their backs. The brackets above the capital that support the ends of the cross beams of the roof are no less carefully finished than the rest of the pillar. The flower scroll which fringes them is deeply out and effective. The four pillars which support the central vault are of one pattern quite different in design from the entrance pillars. The upper half of the shafts with the capitals are round and beautifully wrought with horizontal bands of bead festoons, scroll Fame Faces, figures, niches, and leaves, the niches forming the most striking ornament. Eight of the niches are enclosed by eight little pilasters with florid arches thrown over from top to top of each, and each pilaster is again crowned with a miniature spire. In the niches, in high relief and carved with spirit, are prancing horses with riders and dancing The band of niches is octagonal in plan each niche occupying a face of the octagon the pilasters being at the corners. Below this are four larger niches and pilasters each niche occupying the face of a square, and each pilaster surmounted by a miniature spire. Along the upper edges of the architraves over the pillars. has been a band of fretwork. This, which is about six inches deep and about an inch thick, is carved so as to stand out from the architrave and is connected with it by only a few little blocks left here and there. Most of this delicate fret has broken away. The central ceiling is vaulted on the square of the four pillars, and is unlike the usual ceilings which are generally domes formed of horizontal circular courses of mouldings. It is prettily ribbed with principal horizontal and vertical and subordinate horizontal vertical and diagonal ribs. Between these, where the minor ribs cross each other, little knobs depend. In the shrine sits Sarasvati crosslegged on a throne. It is a life-sized figure in black stone most delicately and carefully wrought. At first sight the figure seems naked but examination shows a fine textured garment with a

prettily wrought pattern passing over the limbs. Sarasvati wears a very elaborate head-dress like a high crown. Round her neck a lavish profusion of necklaces, carved in imitation of heads, pearls, and other precious stones falls gracefully over the bosom. Like her neck her wrists and arms are heavily laden with ornaments. The cornice of the hall or mandap is made of large flat straight stones sloping downwards at an angle of almost 45° and projecting considerably over the pillars. Above the cornice is a moulding of

horse-shoe arches surmounted by Fame Faces. In front of and at right angles to Sarasvati's temple, filling the centre of the courtyard, is the larger temple of Trikuteshvar. This consists of two halls, or a double hall, running east and west, with a shrine at each end and a small minor shrine attached to the north side of the double hall. In the west and principal shrine a shalunkha. or ling case holds three lings from which the temple takes its name of Trikuteshvar the Three-pointed Lord. The building is really a double temple or rather two temples facing one another and joined together. Between the two halls is a small space with a doorway to the north and south. The doorway to the north enters the small attached shrine while the south doorway enters on the courtyard. This small ling shrine has been built on the north doorway at some time later than the building of the temple. In the shrine on the east is an unused throne on which a figure was originally placed. The inside of the temple on the whole is plain, but the workmanship of the outside claims attention. The outside of the east hall is specially good. Its south doorway is a few feet in front of, and looks into the entrance of, the temple of Sarasvati. Its north door enters the courtyard. A plinth, surmounted by a low sloping parapet like that of Sarasvati's hall, runs round the north and south sides of the hall. Instead of the little pilasters on Sarasvati's plinth is a close succession of figured niches representing mythological personages, and the medallions of the parapet are replaced by niches with figures. Between the top of the parapet and the eaves and from pillar to pillar completely enclosing the hall, are slabs of stone on which is worked a diaper pattern of squares with scroll-work running through them. Alternate squares have a lozenge-shaped flower set into them, with the corners of the square perforated and thus in addition to the doorways allowing air and a faint light to pass into the hall. The profusion of small figures averaging six inches in height which abound on the outside of this hall is remarkable. They are neatly and carefully cut in high relief and their limbs are in many cases detached from the back ground. The door on the south side of the west hall is beautifully worked, but paint and plaster almost hide its delicate traceries. The rest of the walls are the usual style of vertical mouldings pilasters and niches found in almost every Chalukyan temple. The spire or vimán above the shrine is an ugly late addition of brick and plaster.

The temple of Somesivar is now used as a school-room. It has one of the most profusely decorated exteriors in Dharwar. Not a square foot on the walls but has some moulding or ornament. The sanctuary is square outside with four thin parallel projections

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added to each face, the outermost projection being about one-fourth the length of the side of the square and the others going back in lessening steps. Those projections are carried right up the walls and the spire, the corners of the square being more strongly marked than the other corners. The great amount of moulding and ornament on the walls and spire break and to a certain extent lide the continuity of these projections. The very strongly marked horizontal recessed mouldings in the basement, a deep overhanging cornice, and deep step-like storeys in the roof give the architecture a horizontal accentuation as strongly marked as its vertical · accentuation. The lines of the basement are covered with scrolls of little elephants, tigers, and horses. Miniature spired shrines or niches fill the centre of each face one in each. basement are carried all round with pairs of pilasters supporting small spires. On the front of each pair of pilasters is a little niche with an arch of scroll-work over each. The centres of the north, west, and south walls have a large principal niche, each of which held an image at least eighteen inches high. The hall or mandap is square with a porch and doorway on the south and a doorway on the east. The ornamentation and the moulding round the shrine are carried over the south and north walls of the hall. The east wall is plain rubble with pilasters and projecting brackets, which show either that the building originally stretched beyond its present limit or that the original wall, like the north and south walls, has fallen away and the end been closed by a plain wall. The doorway on this side is very finely carved, after the style of the doorway of the Kashivishveshwar temple at Lakkundi, though perhaps not so The ceiling of the south porch is very richly wrought in slabs of arabesque with a lotus in the centro of each panel. The interior of the temple is plain and the dome in the hall rests on four central pillars. To the south of Someshvar's is Rameshvar's temple. Like Someshvar's only two courses of the spire are left. The walls are plain but little of them can be seen, so thickly built round by dwellings is the temple; which is now used as a store room.

Virnáráyan.

Virnariyan's temple in the market is built of black hornblende. It is remarkable neither for its architecture nor for its age, as it probably belongs to the thirteenth or fourteenth century. The chief point of interest is a large and lofty gateway or gopur in the eastern wall of the courtyard, built in the South Indian style. The gateway is over 100 feet high and has a richly decorated brick top. Some curious carvings supposed to be the remains of earlier buildings have been worked into it,

Hero Stones,

In a walled enclosure in Bettigeri village is a group of fifteen old hero-stones which look like the linge old head-stones which have been found in some English graveyards. Of the fifteen stones the largest stands about thirteen feet above the surface of the ground. The faces of the stones are generally divided into three sculptured panels or compartments. The lowest panel shows a battle sceno where the deceased met his death, he himself figuring in the panel as the hero of the fight. Some of the stones have a plough or an oil-mill carved in this panel perhaps to mark the casto of the deceased. The second panel shows the deceased being carried to

the gods between winged figures. The first or topmost panel shows a god or the hero seated on a throne. The tops of the stones are cut into long Dravidian roofs with an urn on the top. Several of these stones have inscriptions in Old Kanarese characters, and one with the largest inscription is just in front of the village gate. A platform has been built round it and a small ling set before it. The stone itself is black and caked with dry oil which is daily applied.

Inscriptions,

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GADAG.

In the Gadag mamlatdar's office are several copperplate grants and about twenty inscriptions occur in or near the temples. the twenty inscriptions ten are in or about the Trikuteshvar temple seven of which vary from 1002 to 1539 and of the other three tho dates have not been made out. The first inscription consists of thirty-two lines in the Old Kauarese character and language, each line containing about forty-three letters. The characters are large and slanting and the tablet is chipped in places. Though not easy to read the inscription on the whole is well preserved. It records a grant in 1002 (S. 924 Shubhkrit samvatsar) to Trikuteshvar while the great chieftain king Sobhan was governing the Belvola Three Hundred and some other districts under the Western Chalukya king Satyashraya II (997-1008). The emblems at the top of the stone are in the middle a shrine containing a ling with a priest to its right and Basav to its left. To the right of the shrine are two seated figures, a man with a lute and a woman. To the left of the shrine is a cow and calf and above it are the sun and moon. The second inscription, also in the Old Kánarese character and language consists of forty-five lines, each line containing about fifty-one letters. There are many flaws in the tablet and the inscription is rather hard to read. It gives the names of the Chalukya kings Jayasimha III. (1018-1042), Ahavamalla II. (1042-1068), and Vikramáditya VI. (1075-1126) and of a princess Báchaldevi who appears to be the wife of Vikramáditya VI. The inscription records a grant made in 1100, the twenty-fifth year of the reign of Vikramaditya VI. by a subordinate chieftain. The emblems at the top of the tablet are a ling and a priest in the middle, a cow and a calf to the right, and Basav to the left. The third inscription is in the Old Kanarese character and language. It has about fifteen lines above the ground, each line of about thirty-seven letters. It is fairly preserved and refers to the time of the Kalachuri chief Sankamdev (1175-1180), one of the sons of Bijjala. The emblems at the top of the tablet are in the middle a ling with a seated figure on its right and a standing figure on its left. To the right of this central group is a figure of Basav with the sun beyond it, and to the left is a cow and calf with the moon beyond them. The fourth inscription in Old Kanarese characters and the Sanskrit language consists of fifty-six lines each of about fifty-four letters and well preserved. It records in 1193 (S. 1115 Paridhavi samvatsar) a grant to the god Trikuteshvardev by the Hoysala chief Vir Ballál

Details of Konkan memorial battle-stones are given in Bombay Gazetteer, XIV. 57-59, 300-311. A representation of a battle-stone is given by Mrs. Guthric in her Life in Western, India, II, Title-page.

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GADAG.
Inscriptions.

(1191-1213), who, having wrested Kuntala from the Devgiri Yadavs. is mentioned as fixing on Lokkigundi, the modern Lakkundi, as his capital. The emblems at the top of the tablet are, in the middle, a man worshipping three heads on an altar. To the right of the central group is a figure of Ganpati, and beyond Ganpati a figure of Basav: and to the left a female deity with a cow and a calf and a crooked knife beyond. The fifth inscription also in Old Kanarese characters and language is on a tablet which lay on the edge of a small pond ontside the temple enclosure, but was removed and placed against the outer side of the south wall of the temple courtyard. The inscription is in fifty-seven lines each of about thirty-eight letters. It records a grant in 1199 (S. 1121 Siddharthi samvatsar) by the great chieftain Raydev the supreme lord of Asatimayurpar, the prime minister of Vir Ballal (1191-1213) the son of Hammidev who was the son of Raydev and the governor of the Belvola Three Hundred. The emblems at the top of this tablet are a ling and a priest in the middle; Basav with the moon above to the right and a cow and a calf with the sun above to the left.

The sixth inscription is in Old Kanarese characters and is partly Sanskrit and partly Old Kanarese in language. It consists of fity lines, each line containing about thirty-seven letters. Except in one or two places where the surface of the tablet has been chipped the inscription is well preserved. It begins with a description of the gift village² of Kratuka that is Gadag in the Belvola Three Hundred, and records a grant made in 1213 (S. 1135 Ångirasa samvatsar) to the god Trikuteshvardev, while the governing king was the fifth Devgiri Yadav Singhana II. (1209-1247). The emblems over the inscription are a ling and a priest within a shrine in the centre, to the right a cow and a calf with the sun above them, and to the left a figure of Basav with the moon above it.

The seventh inscription is in the Kanarese character and language on a tablet standing just inside of the west gateway of the temple courtyard. It consists of fourteen lines each of about thirty-five letters. It is dated 1539 (S. 1461 Vikári samvatsar) and records a grant made by or at the order of the Vijaynagar king Achyutráy. A few badly cut emblems adorn the top of the tablet, a ling in the middle, a figure of Basav with the sun above it to the right, and a cow and a calf with the moon above them to the left.

Of the three inscriptions, whose dates cannot be made out, the first is a very short inscription in an angle outside the temple shrine. Perhaps it records the name of the builder. The second inscription is in the Devnagari character and Sanskrit language. Eleven lines are above ground each of about thirty-one letters. The inscription

¹ The three heads probably denote Shiv as representing the Brahma Vishnu and Shiv triad. The female deity to the left of the altar appears to be Shiv's wife or the female principle Parvati.

² The word in the original is agrahdra which means lands or villages granted to

Brahmans for religious purposes.

Belvola Three-Hundred means the Belvola subdivision of three hundred villages.

Belvola or Belpola is an old Kanarese word meaning a field of standing corn. The name was given to the fertile district near the centre of which are Dambal, Gadag, and Lakkundi.

is in good order, but the portion above ground is not enough to make out its contents. The emblems at the top of the tablet are a ling and a priest in the middle. To the right of this central group are a cow and a calf with the sun or moon above them, and to the left Basav with the moon or sun above it. The third inscription is in Old Kanarese characters and language, and has above ground eighteen lines each of about twenty-five letters. The first seven or eight lines are in good order; in the lines that follow the letters are rather faint and a large portion of the face has been chipped off in the centre of the tablet. The emblems at the top are a ling and priest in the middle; to the right a cow and a calf with the sun above them, and to the left a figure of Basav with the moon above it.

Of seven inscriptions in or about the Virnáráyan temple, four vary from 1037 to 1539 and of the other two the dates have not been made out. The first inscription dated 1037 (S. 959) is behind the temple on a stone built into the lower part of the enclosing wall; the second dated 1098 (S. 1020), is on the roof of a room in or at the same temple; the third, dated 1100 (S. 1022), is in the enclosure to the north of the temple; and the fourth is dated 1539 (S. 1461). Of the three inscriptions whose dates cannot be made out one is in the enclosure wall short and partially effaced. The second inscription is on a stone leaning against the western wall of the temple courtyard. It consists of seventy-two or seventy-three lines, each line containing about sixty-three letters. The characters are Old Kanarese rather small. The surface of the stone is too worn to be read, but the inscription appears to be about 400 years old. Emblems over it represent Ganpati, Náráyan, Sarasvati, and Virbhadra, a cow and a calf, and the sun and moon. The third inscription, also in Old Kánarese characters, stands up against the east wall of the courtyard. At the top is a well carved representation of Krishna playing the pipe to which men women and animals dance. It is in sixty-nine lines, each of about forty-two letters. It appears to be about 400 years old but is more legible than the first. On a stone lying on the threshold of the temple of Narsimh to the south of the Virnáráyan temple is an inscription dated 1539 (S. 1461), and at the small resthouse east of the south gateway behind the temple of Narsimh is a partly hewn-out inscription dated 1124 (S. 1016). A stone inscribed in Devnágari characters lies on its face on the bank of the Gadag pond.

The old, perhaps the Sanskritised, name of Gadag was Kratuka. The two temples of Trikuteshvar and Virnáráyan¹ are of about the tenth or eleventh century, and the inscriptions in them, varying from 973 to 1539, show that Gadag was at different times under the Western Chálukya (973-1190), Kalachuri (1161-1183), Hoysala Ballál (1047-1310), Devgiri Yádav (1170-1310), and Vijaynagar kings (1336-1587).² About 1673 Gadag appears with Nasaratabad or Dhárwár as one of the chief districts in the Bankápur district or

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¹ According to a local manuscript account of Shravan Belgola in Maisur, the Virnárdyan temple is one of the five Nárdyan temples built about 1117 by the fourth Hoysala king Vishnavardhana (1117-1137) on his conversion to the Rámánuj faith. Indian Antiquary, II, 131.

² See above, pp. 717-719.

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sirkar. On the capture of Dambal fort on the 26th of July 1799. Colonel Wellesley marched on the 27th to Gadag, but found it evacuated by Dhundia's men. Colonel Wellesley gave over charge of both the Dambal and Gadag forts to the Peshwa's commandant. whom Dhundia had confined in chains at Gadag.2 In the last Maratha war General Munro invested Gadag on the 5th of January 1818. It surrendered on the 6th after a few shells had been thrown and a battery raised.3 In 1827 Captain Clunes notices Gudduck as a usual halting place with 800 houses, thirteen shops, and wells. In 1844, Gadag-Bettigeri had 2000 houses and 12,302 people, 3168 of thom weavers with 1507 looms; in 1874 there were 3453 houses with 18,154 people, 5043 of whom were weavers with 1399 looms.

Galagnátii.

Galagna'th on the left bank of the Tungbhadra about twenty miles north-east of Karajgi, with in 1882 a population of 342, has temples of Gargeshvar and Hanumant. The Gargeshvar temple to the north of the village, at the hely meeting of the Varda and the Tungbhadra, is built of black granite and is about eighty feet long by forty broad with four pillars supporting the roof, and walls covered with mythological figures. The temple has two inscriptions dated 1080 and 1147 (S. 1002 and 1069). The Hannmant temple has a monumental hero-stone or virgal to the right of the image dated 1011.

GARAG.

Garag, a large village about ten miles north-west of Dhárwár, with in 1872 a population of 4350 and in 1881 of 4465, has a district bungalow and a large trade in coarse country cloth. In . 1827 Captain Clunes montions Gurrug as a kasba and post station with 500 houses, fourteen shops, and a temple.

Geljihalli.

Gejjihalli, a small village two miles south of Mangal, has a temple of Basaveshvar with two inscriptions, dated 1103, on either side of the image.

Gudduddhrur.

Gudgudda'pur or Devaroud, a municipal village of 546 people, on the top of a steep hill eight miles north of Ranebennur, has a large fair in October with an attendance of 5000 to 10,000 people. The fair is held in honour of the god Mallari or Shiv, the slayer of the demon Malla. In the village is a temple of Mailar or Mallari built of black polished stone with a brick spire. The roof is supported on twenty pillars four of them round and sixteen square. The outer walls are adorned with carved figures. the main temple are several smaller shrines two of them of fair size, consecrated to the goddesses Mallasama and Mallaridevi.6 chief temple enjoys a yearly Government grant of £33 8s. (Rs.334) in land and £1 (Rs. 10) in cash. Presents valued at about £100 (Rs. 1000) are made yearly by pilgrims. The temple also owns £1500 (Rs. 15,000) worth of clothes and ornaments. The local

¹ Orme's Historical Fragments, 286.

² Supplementary Despatches, II 74-80. Six of Colonel Wellesloy's despatches are dated Gudduck, 27th July 1800.

³ Blacker's Marátha War, 287.

⁴ Itinerary, 72.

⁵ Bom. Gov. Scl. CLIV. 8.

⁶ Dr. Burgess' Lists; Mr. F. L. Charles, C.S.; Ráv Bahádur Tirmalráv.

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GUDGUDDÁFUR.
Fair.

story of Mallari is that he became incornate here as Bhairay, and. with his fifteen feet long bow, killed the demon Malla, who infested the neighbourhood. He thereupon won the title of Mallari or the Malla-slayer and was enshrined in the temple on the hill. Mallari used to go hunting with a pack of hounds. When he was enshrined on the Devargad hill, the dogs became men and served as his ministrants under the names of Vaggyas and Goravarus. Sixty families of these dog-ministrants live on the hill round the temple. The fair begins on the day before Dasara in September-October and lasts two days. From 5000 to 10,000 people attend from all parts of Dharwar and from Belgaum, Bijapur, and Maisur. On the fair days pilgrims pay their devotions to the god and feed the poor. Dancing girls dance before the god at the nightly lamp-waving or úrti. The fair owes its chief interest to the Vággyás, who dressed in black woollen jackets or kámlis with quaint headkerchiefs or rumáls, to the great amusement of the people, play the part of dogs in remembrance of their life with Mallari the huntsman The Vággyás wear cowrie shell necklaces, tie bells and tiger and bear skins round their waists, hold in their hands a wooden bowl about cight inches square and four inches deep, and try to look as ugly and wild as possible. When pilgrims come the Vaggyas bark most furiously at them and hold out their bowls. Each pilgrim pours a little milk and clarified butter into the bowl, throws in plantains sugar and other entables, and gives each Vággya a farthing (1 a.). Sometimes ripe plantains milk curds clarified butter and sugar are mixed together and poured into the bowl. The Vággyás set the bowls on the ground, run each to his bowl, begin to bark and howl like dogs, quarrel between themselves, lie flat on the ground, and, putting their mouths into the bowl, eat like dogs. When they have finished eating the Vággyás sing a verse in honour of Mallári; loudly howl out Elkote Mallári Mártand that is Mallári Martand (with his army of) seven crores, and bless the pilgrims for feeding them. This satisfies the pilgrims that Mallari has been pleased and has blessed them through his dog ministrants. At a fixed hour on Dasara Day the great bow of Mallari is brought out and set on the ground before the pilgrims. A ministrant climbs to the top of the bow, becomes possessed by Mallari, and calls out Thunderbolt strikes earth, Cat quarrels with dog, Head cut off, which foretell for the new year famine, war, or a change of rulers. Unlike Jejuri and Alandi in Poona no girls are married to the god and allowed to live near the temple as prostitutes. But a woman, who to get children or for some other reason has vowed to be the god's concubine, on the fair days, presents the god with betel as though he were her husband.2 The trade at the fair is mostly local, chiefly in cattle, grocery, ironware, and pottery.

¹ This long bow is still preserved and daily worshipped.

² Among Hindus, women after a meal sit near their husbands, sub-net local piece in a fancial shape, and preserved to their husband, with betelnut cardamons cinnamon and chare woman will make up and give betel to any man but her husband.

Tirmalrav Vyankatesh.

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Gopgoodkron. Municipality. On the 22nd of January 1878 a municipality was established at Gudguddápur. It is maintained from a pilgrim and shop tax levied during the fair days. Except during the two days of the fair there is almost no work. In 1882-83 the pilgrim tax and shop cess yielded £73 (Rs. 730) against £52 (Rs. 526) in 1881-82; the increase was due to a rise in the number of pilgrims of whom about 10,000 are estimated to have attended the fair. The expenditure in 1882-83 was £171 (Rs.1710) most of which was spent in water works, repairing roads, and planting roadside trees. The nunicipality owns a rest-house built at a cost of £301 (Rs. 3010) and a pond for water-supply.

GUDGUDI.

Gudgudi, a small village five miles north-west of Hangal, with in 1881 a population of 287, has a temple of Kallapa with two inscriptions dated 1038 and 1072.

GUTTAL

Guttal, with in 1881 a population of 3176, is a large village about twelve miles east of Karajgi. Guttal was a petty divisional head-quarter till 1862. A weekly market is held on Mondays when all kinds of field produce are sold. Guttal has a black stone temple of Chudshekhar with two inscriptions of twenty-four and ninety-five lines; and an old irrigation reservoir with very handsome outlets through the dam formed of elaborately and handsomely carved stone work. Behind the reservoir are square ornamental cisterns with beautifully chiselled stone pavilions in the centre. Guttal is perhaps the Guttavolal of a Kalachuri inscription dated 1181 (S. 1103 Plava samvatsur). The inscriptions mention the city of Guttavolal governed by the Gutta chieftain Vikramáditya as an underlord of the sixth Kalachuri king Ahavamalla (1176-1183). In 1237 in an inscription of the Devgiri Yadav king Singhan II. (1209-1247) a grant is mentioned as having been made near Guttal with the permission of the Gutta chieftain Joyidev.

HALLUR.

Hallur, a village of 654 people on the left bank of the Tungbhadra about eighteen miles south-east of Kod, has an old temple of Rangnáth and an inscription. At the northern boundary of Hallur is the old village of Bhairavanpad with 100 people, the capital of the Sindhu Ballál dynasty, whose family god Bhairav gave his name to the village. The old temple of Rangnáth was ruined by Tipn Sultán (1782-1799); the present building was made by the Svámi of Kudálgi to whom the village was granted by Hanmant Gand a chief of Háynur.

HAMGI.

Hamgi near Sirhatti is the family residence of the desdis of Sirhatti. In 1858 Kenchangauda Bahádur Desái of Hamgi joined the Nargund rebellion, was killed at Kopal in the Nizam's dominions, and his estates confiscated.³

HANGAL,

Ha'ngal, in north latitude 14° 46' and east longitude 75° 12' about fifty miles south of Dhárwár, is the head-quarters of the Hángal sub-division. Hángal is an old town the Pánungal of inscriptions. Besides the sub-divisional revenue and police offices, it has a Collector's bungalow, a ruined fort, temples, and inscriptions. In

¹ Mr. R. B. Joyner, C.E. ² Fleet's Kánarese Dynastics, 6 note 4.
³ Mr. J. R. Middleton, C.S.

1872 Hangal had a population of 4990. The 1881 returns showed a population of 5272 or an increase of 282. The 1881 details are Hindus 3271, Musalmans 1997, and four Christians. A municipality was established in 1879 and abolished in 1883. The ruined fort is a mud ghadi about 1900 feet round with walls and sixteen bastions. Inside of the fort is a temple of Virbhadra shaded by trees and brushwood. The walls are on all sides easy of escalado and the dry bottom in front hardly looks like a ditch. The village is near the fort and its streets would cover an attacking force. Round this inner tower are traces of a wall which is locally called the Halekot or old castle. The citadel is situated on the left bank of the Dharma river which flows round its southern and western faces, and turning to the west, falls into the Varda near Narcgal about twelve miles further down the valley. The south-east corner of the citadel rests on the Anikeri pond,1 after which the single outer wall is developed on the castern face into three lines of defence, which, sweeping round the north side, join the works on the river, where it diverges to the west. Besides the outer defences the outermost line of the triple wall is carried onward, from the point where it turns to the west, to a low range of hills through which a ditch has been cut near a large tree from which the wall is continued round to the river. As the range of hills still commanded the place a further work can be traced, though very faintly in places, to a trench dug through the hill to a Musalmin tomb from which the rampart is continued till it joins the fourth wall, making in all, exclusive of the walls of the citadel, five lines of defence. Traces of other mounds can be seen beyond, these stretching eastward, but whether connected with the defences of Hangal cannot be made out. The diameter of the fort wall is about seven or eight hundred yards and of the central tower about 350 yards. The circuit of the old fortified area is upwards of four and a half nules and the earthwork is on an aneually large scale. The lines have disappeared in places and can be traced with difficulty; in others they are well marked.

Haugal has thirteen temples, three of Hanuman and one each of Durga, Gop drav Desai (the builder's name), Ishvar, Narayan, Ramling, Tarakeshvar, Virbhadra, and Virupaksh. The other two, one of which is called Kichakajit's, are runed. The Tarakeshvar

temple is the most interesting.

It is a large and elegant cut stone building of black granito a little to the cast of the modern village of Hangal. The temple is in four parts, a small anterson (21'×21') with four pillars, an audience hall or subhimandap (60'×41') with twenty pillars twelve pilasters and eight small pillars, the porch of the shrino (30'×30') and the shrine which is irregularly round. The roof of the temple is to covered with plaster that it is difficult to make out its original form, but the plaster serves to protect the interior which is perfectly preserved. In the porch of the shrine is a be untiful lotus pendant. It is a solid octagonal stone, nearly thirty feet in diameter, carved like a lotus and supported on eight richly

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HANGAL,
Fort.

Temples.

Tdrakerwar.

The stone facing of the long dam of the Amberi peat is formed of all carved temple stones, a me of which have writings upon them. Mr. E. B. Joyner, C.E.

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sculptured pillars. Round the walls of the interior of the same compartment, in panels pointing towards their respective stations, are figures of the eight guardians of the quarters in bold relief. The walls of the entire temple are covered with mythological sculptures. Two or three remarkable hero-stones or virgule rest against the outer wall near the south entrance. They are very large and contain many figures. One of the stones represents the storning of a fort. Near one of the Hanumán temples in the citadel is a small temple with some curious and interesting sculptures of Nága men and women. About half a mile to the south of Hángal is the temple of Bileshvar. It is said to be 500 years old and contains some carving.

Inscriptions.

There are eleven inscriptions at Hangal of five of which the dates . have been made out. The earliest is dated Wednesday the first of the bright half of Chaitra or March-April in 1113 (S. 1035 Vijaya samvatsar), the thirty-eighth year of the reign of the Western Chalukya king Vikramaditya Tribhuvanmalla. Two are of the Western Chálukya king Nurmadi Taila, but whether the first (973-997) or second (1150-1162) cannot be said as the inscriptions are both There is a hero-stone or virgal at a monastery called the Budimath, dated 1175; two inscriptions in Tarakeshvar's temple dated 1179 and 1196, the latter of the time of the Hoysala king Ballál II. (1191-1211) and of the Kadamba chief Kamder (1181-1203). This inscription is on a hero-stone or virgal, on which battle scenes are very vividly sculptured. It records that in 1196 Ballal II. came and pitched his camp at the Anikeri pond and thence besieged the city. He was defeated and repulsed for a time by Kámdev's forces under his generals Sohani and his son Padmayya or Padmana. As Sohani was killed in the battle, he is probably the hero of the stone.2 Another undated inscription of Kamdev, and an undated hero-stone or virgal are inside of the temple. In the temple of Ishvar is an inscription dated 1189, and there are two undated inscriptions one on a dust-heap in front of the temple of Mailardev and the other at the temple of Hanuman in the citadel.

Old Mound.

About 600 yards west of modern Hángal is a remarkable conical mound locally known as Kuntina Dibba or Kunti's hillock. It is, believed to have been formed of the husks of the grain ground for her sons by Kunti, the mother of the Pándav princes, during their twelve years of exile part of which they spent in Hángal. About 1830 Sir Walter Elliot ran a trench nearly into the centre of the mound at the base and also dug down a few feet from the top, but it appeared to consist entirely of earth.

History.

Hángal, called Virátkote Virátnagari and Pánungal in inscriptions, is locally believed to be the place where the Pándavs lived during part of their exile from Delhi. The names Virátkote and

Indian Antiquary, IV. 205, V. 177-180; Dr. Burgess' Lists, 22-23.
 Fleet's Kanarcse Dynasties, 86.

In connection with the same local tradition a small ruined temple in Old Hangal within the citadel is dedicated to Bhim the giant Pandav as Kichakajit or the conqueror of the demon Kichak.

Indian Antiquary, V. 179.

Viratnagari the Fort and City of Virat which occur in inscriptions support the tradition, as, according to the Mahabharat, Virat was the king at whose court the Pandays spent the thirteenth year of their exile and whose daughter Uttara was married to Arjun's son Abhimanyu.1 The dated inscriptions in Hangal vary from 1113 to 1196 and show that Hangal, generally called Panungal2 was the head of a subdivision of five hundred villages which was generally attached to the Banavási district of twelve thousand villages. Until conquered by the Hoysala king Ballal II. (1192-1211) about 1200, Hangal was governed, as vassals of the Western Chalukyas, by the dynasty of the Kadambas of Baravasi and Hangal (1008-1203). Ballal II. (1192-1211) led an attack on Hangal in person, and, though repulsed for a time, he appears to have completely overcome the Kadambas and annexed their territory about the beginning of the thirteenth century. As late as 1251 a chief named Vir Mallidev or Mallikárjun is recorded as governing the Banavásı Twelve-thousand and the Panungal Five-hundred; whether he was independent or feudatory is not known.3 The four and a half miles of fortifications traced by Sir Walter Elliot, seem to belong to the Kadamba Haugal when it was the seat of government. No references have been traced to Hangal in the Musalman and Maratha periods. In the Maratha war of 1818, on the seventh of February, General Munro detached a company of the 2nd Battalion of the 9th Regiment under Lieutenant Scott, to keep in check the Hangal garrison

Haralhalli, a small village on the left bank of the Tungbhadra fifteen miles cast of Karajgi, with in 1881 a population of 129, has black stone temples of Someshvar Kaleshvar and Udchamma and three inscriptions of 76, 94, and 110 lines. In 1880 a copperplate grant, of the fifth Dovgiri Yadav Singhan II. (1209-1247), was found buried behind the temple of Udchamma. The plates, which are now in the museum of the Bombay Branch of the Royal Asiatic Society, are three in number each about 111 high by 71" broad. edges of the plates are made into rims to protect the writing and except in a few places where the surface has badly rusted the inscription is fairly preserved and readable. The ring on which the plates were strung is about ?" thick and 4?" in diameter. The emblems on the scal are the man-eagle Garud carved in relief, kneeling with folded hands and facing full front. Over his right shoulder is the sun and over his left shoulder is the moon. The character is Devnágari and the language Sanskrit in lines 1-91 and lines 99-100. The eight lines 92-98 describing the boundaries of

of about 800 men. The detachment drove in an outpost, and, on the afternoon of the eighth, was attacked by the garrison. The loss of the besieging force was two killed. The garrison retired and

surrendered on the morning of the ninth.

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HARALHALLI.

¹ Compare Virát Parv, 4th book of the Mahabharat. Fleet's Kamareso Dynasties, 7 note 2 The position of Vuát is not determined. Wilson places it in Berár and General Cunningham in the North-West Provinces. Indian Antiquary, V. 179.

² H. and P. change according to the usual Kanareso rule. Rice's Mysore and Coorg, I. 397.

I let's Kanareso Dynasties, 81-88. Blacker's Marátha War, 291.

Chapter XIV. Places. the land granted are in Old Kanarese. The inscription is dated by seventh day of Phúlgun or March-April in the year 1287 (Shak 110) for 1159) and records a grant of land in thirty shares of two nine tanas each at the village of Ritti the modern Rattehalli about in miles east of Karagji. The granter is the Dandesh Chikkader as underlord of Singhan II. and the names and family stocks or gelms of the grantees are given with the share of each. The inscription mentions the Varda river among the boundaries.

HATTI MATTOR.

Hatti Mattur five miles north of Karagji has an inscribed stone tablet which was found buried to the west of the village pond. The sculptures at the top of the stone are the Nandi bull and the sun and Towards the bottom of the stone, dividing lines ten to nine teen of the inscription in half vertically, is a sculpture of a Jain flower vase with flowers or leaves hanging over its rims. Above the rase is a plain circle with a svastik or lucky cross work in the centre. The writing covers a space of about 2' 8" high by 2' 31" broad in nineteen lines recording two inscriptions. The language throughout is Old Kanarese. Lines one to thirteen record an inscription in the reign of the eighth Rashtrakuta king Indra IV. or Nityavarsh I. The inscription is dated 910 (Shak 838) and records a grant of Vutvur of Kachchavar Kádanuna by the Mahásámant Lendeyaras, governing the Purigore or Lakshmeshvar Three hundred in the presence of the assembly of 220 mahajans of Paltiya Maltavar the modern Hatti Mattur. The object of the grant is not stated; but the vaso sculptured at the bottom of the stone shows that the grant must have been made to some Jain establishment. The second inscription, in lines fourteen to nineteen is undated, but appears to be of the eleventh or twelfth century. It records grants of oil and rice to the god Bhogeshvar. As both inscriptions are on the same stone it seems probable that, by the time of the second inscription, the Jain establishment to which the first grant was made, had been turned into a temple of Shiv under the name of Bhogeshvar.2

HAROGOP.

Harogop, a small village about eight miles south of Ránebennur, with in 1881 a population of 393, has a temple of Hanuman with a much worn inscription in twelve lines.

HAVASBIIÁVI.

Havasbha'vi, a large village on the Kod-Hángal high read about seven miles north-east of Kod, with in 1881 a population of 1278, has a hero-stone or virgal on the bank of a pond dated 1206 (S. 1128).

HAVANGI.

Havangi, about soven miles south-east of Hangal, with in 1881 a population of 839, has a temple of Rameshvar, with, on its south face, three inscriptions dated 1026, 1117, and 1131, the first in the reign of the Western Chalukya king Jayasimh III. (1018-1042). Of four other inscriptions in the village the dates cannot be made out.

HAVERL.

Ha'veri, about soven miles south-west of Karajgi, is a largo municipal town on the Dharwar-Harihar trunk road with in 1881 a population of 5652. Besides the municipality, Haveri has a post office, sub-judge's court, dispensary, temples, and inscriptions. The

Mr. J. F. Fleet, C.S., C.I.E., in Jour. Bo, Br, Roy, As. Soc. XV, 393-385
 Ind. Ant. XII, 224-225.

1872 census gave a total population of 5465 of whom 4659 were Hindus and 806 Musalmans. The 1881 census showed a population of 5652 or an increase of 187. Of these 4828 were Hindus and 824 Musalmans. Ilaveri is noted for its trade in cardamoms which are brought from the Kanara uplands, washed, and sent to Dhundshi Hubli and Maisur. Haveri has a small well of brackish water impregnated with lime and possessing good bleaching properties. The bales of cardamoms imported from Kanara are unpacked and washed in the water of this well. When dry the husks become of a light cream colour. Besides this cardamom trade. Haveri has a considerable general traffic in cotton and other commodities.1 The municipality was established in 1879. In 1882-83 it had an income of £146 (Rs. 1460) chiefly from a house tax. expenditure of £219 (Rs. 2190) was chiefly on sanitation, roads, and improving the water-supply. The dispensary, the only one of its kind in South Dhárwar, was opened in 1878. It is in charge of an hospital assistant, and in 1882 treated fifty-nine in-patients and 12,871 outpatients. Haveri has temples of Halevur, Basvanna, and Kalappa, and a monastery of Raghavendra Svámi. Basvanna's temple has four inscriptions, two of them dated 1131 and 1157. Sidhe Devpur, about a mile cast of Haveri, has a temple said to have been built by Jukhanacharya.

Hobli is a large alienated village about eight miles east of Dharwar, with in 1872 a population of 4839, and in 1881 of 4592. The village stands on rising ground and has a ruined fort. A weekly market is held on Wednesday. Hobli was given in 1718 by Bakiji Bajirav Pe-hwa to an ancestor of the present siridir in lieu of Nargund, of which the sirdir had been deprived by his servant. In 1818 Sir Thomas Munro gave the proprietor the neighbouring villages of Kurdapur and Talva for service to Government. To the south of the village is the temple of Shambhuling about fifty-seven feet long and in the Jain style of architecture. The temple has an inscription, dated the eighth of the bright half of Bhadrapad or August-September in the year 1244. Hebli has a ruined temple of Changalovadevi.

Hoggori, about sixteen miles south-east of Kod, has a temple of Kallapa with an inscription dated 1182.

Horobidri, a small village on the left bank of the Tungbladra about ten miles north-east of Ranchennur, with in 1881 a population of 1177, has an old temple and three inscriptions one of them in fifty lines dated 1283.

Herur, a small village ten miles east of Hangal, with in 1881 a population of 553, has a temple of Basappa with, near a poud, a hero-stone or ringal bearing an inscription dated 1157.

Hire Ba'sur, a small village fifteen miles south-east of Hangal, with in 1891 a population of 322, has a temple of Vishveshvar with an inscription (1'6' × 1'6"), and a temple of Hanuman also with an inscription (3' × 1'6"). On rising ground near the village is a cave which is believed to pass a great distance underground.

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HAVERI.

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Places.

Hirebendigerl

Hirebendigeri, about seven miles north of Shiggnon, is a large village in the Bankapur sub-division with in 1881 a population († 1362. A weekly market is held on Wednesdays when grain is chiefly sold. The village has a temple of Kalappa and to monasteries called the Hire and Koradya maths. Kalappa's templ has an inscribed stone (5'6" × 2'8") much worn; the Hire monaster has a second inscribed stone 6'6" long by 1'6" broad, and the Koradya monastery a third stone 6'6" long by 1' broad.

BIBERALLY.

Hirehalli, about twelve miles north-west of Kod, has an eld temple of Ganpati and an inscribed slab.

HIREKERUR.

Hirekerur, 14° 28' north latitude and 75° 28' east longitude about seventy miles south-east of Dharwar, is the head-quarters of the Kod sub-division, with in 1881 a population of 2348. It is the head-quarters of the mamlatdar and has the usual sub-divisional revenue and police offices. About two miles to the north of the village is a large pond used for irrigation. A weekly market is held on Mondays when rice and chillies are chiefly sold. The climate is unhealthy, and fever and ague generally prevail in the cold and rainy months. Hirekerur has four temples and eleven instrictions varying in date from 1062 to 1172. The four temples are of Darge, Totad-Virbhadra, Varáhkáleshvar, and Vishpariháreshvar, the last of whom is believed to cure snakebites. Totad-Virbhadra's temple has four inscriptions, three of them dated 1065, 1099, and 1172. The large pond is ascribed to the Puranik king Janamejaya, and an inscribed slab near the Vishparihareshvar temple is said to give an account of its construction. Five inscribed stones in different places on the banks of the pond vary in date from 1096 to 1131.1 Astone in the burning-ground is dated 1062, and another to the east of the mosque near the village gate 1143.

HIRUR.

Hirur, a village four miles south of Hangal, has a temple of Sangam-Basaveshvar, with, to the left of the image, an inscription dated 1018.

Holianveri.

Holianveri, about twolve miles south-east of Ránebennur, with in 1881 a population of 431, has a temple of Kalappa, with an inscription dated 1182 in the reign of Ahavamalla (1176-1183) a son of the Kalachuri Bijjala.

HOMBAL.

Hombal is a large village seven miles north-west of Gadag, with in 1881 a population of 3226. It has a temple of Ishvar with an inscription dated 1049 (S. 971). To the south on a well near a temple of Bhogeshling is another inscription dated 1115.

HOSHALLI.

Hoshalli, about four miles south of Kod, with in 1881 a population of 461, has on its west a temple of Mallapa with two inscriptions, one of them dated 1242. The other inscription whose date has not been made out is on the south wall of the temple.

Hosur.

Hosur, a small village ten miles south-east of Gadag, with in 1881 a population of 510, has a temple of Ballaleshvar with painted

¹ The details are: 1096, 1101, 1103, 1109 or 1131. The date on one stone is doubtful.

walls. It has three other old temples rapidly falling into decay, and one inscription dated 1207 recording a grant by one Yadav Ballal 'Náráyandev.

Chapter XIV. Places.

Hubli¹ correctly Hubbali in north latitude 15° 20' and east longitude 75° 13', the head-quarters of the Hubli sub-division, on the Poona-Harihar road, about thirteen miles south-east of Dharwar with in 1881 a population of 36,677, is the most important

HUBLI.

town in the Bombay Karnatak, and the tenth in the Bombay Presidency. Besides the sub-divisional revenue and police offices, Hubli has a sub-judge's court, a municipality, post and telegraph offices, a dispensary, the establishments of two European firms, and cotton gins and presses. A station on the Marmagoa-Belári railway, about 112 miles east of Marmagoa and 132 miles west of Belári, and a steam spinning and weaving mill are being built.2

Position.

The town is in two parts Old Hubli and New Hubli, which together cover an area of 1778 acres or about 23 square miles. Hubli stands about 2500 feet above the sea on a gently waving plain rising towards the west. Except a few small hills to the west, south-west, and north-west, the country round is a black soil plain. Old and New Hubli are not more than 400 yards apart, Old Hubli to the west and New Hubli to the east. Neither town is visible from any great distance. About 41 miles from the north a large grove of trees and the chimney of the Southern Maratha Spinning and Weaving Mill come into sight. About a mile to the north of the two towns is a temple of Basvanna with a double-storeyed gateway.3 From the east the first signs of the town are within half a mile of New Hubli some gardens and mango groves. The entrances from this side are Ganeshpeth street from the north-east and Bhandivad street from the south-east. From the south a large stretch of trees can be seen from high ground about two and a half miles distant. From the west also groves of mango and other trees completely hide the town buildings. The town of Old Hubli stands on the village lands of Krishnapur, Marian-Timságar, and Ayodhia. In 1727 Basappa the head trader of Old Hubli quarrelled with the commandant of Old Hubli fort, and with the leave of Abdul Majid Khan Dilavarjang Bahadur Nawab of Savanur, built the town and fort of New Hubli on the site of Bomapur village. Afterwards the town spread on all sides and now covers portions of nine villages Bomápur, Marian-Timságar, Madináikan Arlikatti, Bidanhál, Yellápur, Virápur, Náráyanpur, Nágsettikop, and Keshavpur.

Divisions.

Between 1873 and 1882 Old and New Hubli were surveyed and divided into four parts A, B, C, and D. The inhabited portions of both towns together cover an area of about 755 acres of which Old Hubli occupies about 200 and New Hubli about 555 acres. The suburbs within municipal limits cover about 1023 acres more.

¹ Contributed by Rav Bahadur Tirmalrav Vyankatesh.

Details of the mill are given above under Trade.

3 In the early years of British rule when the Principal Collector came to Hubli, the officials and leading men of the town used to meet in Basvanna's temple, and with music and dancing girls, escort the Collector to his camp or to the old travellers bungalow which has since been pulled down.

Places.
Hunt.

An official account of the fort and town of Old Hubli in 1823-24 (Fasli 1233) shows that the fort was then in good order with twenty-eight good and eight ruined bastions, and was surrounded by a dry ditch. There was a reservoir near the temple of Bhayánishankar with bad water, two sweet water wells called Asárbávdi and Kotarbávdi, and seven brackish wells. The town had three main divisions Chennapeth, Kasba or the town proper, and Vithalpeth, and ten sweet water and thirty-eight brackish wells. The fort and town had between them twenty-nine Hindu temples, twenty-two Lingáyat monasterics, and twelve mosques. A market was held on Saturdays. The town had 416 houses, 345 families, 508 looms, eighty-nine shops, and eleven oil presses. The Government tax on houses amounted to £364 14s. (Rs. 3647).

Old Hubli Fort.

Old Hubli Fort covers an area of about twenty-three and a half acres, and contains 225 houses and a population of about 1000. About two-thirds are Brahmans, some of them landholders but chiefly priests. The remaining one-third are Musalmans, most of them weavers husbandmen and labourers. The fort had two covered entrances. The chief entrance was to the east with three doorwave one inside the other, and the smaller entrance was towards the west with two doorways one within the other. All traces of these gates have been removed. Parts of the walls and bastions of the old fort fell down; other parts were pulled down during the 1876 famine as a famine relief work. Parts of the fort wall and the ditch remain overgrown with prickly-pear. Almost all the houses in the fort are old and ruined. The mansion of the Musalman proprietor of Old Hubli, who belonged to the powerful Tarin family and was at one time a general in the Moghal army, was levelled to the ground about 1780 by Tipu and his officers.1 The old town of Hubli seems never to have been walled, at least no traces of walls are left. The town has several gateways each called after the street to which it gives entrance. The southern entrance is called the Bankapur gate, as it led to Bankapur thirty-three miles to the south then the scat of the Bijapur governor. A large covered gateway is said to have adorned the Bankapur entrance, but no trace of it remains.2 The houses in the town are old, but not so ruined as the houses in the fort. Three or four substantial dwellings and a temple have lately been built to the east of the old town on the road to New Hubli.

New Hubli Fort.

New Hubli Fort covers an area of eight acres, and contains 147 houses and a population of about 750 mostly Brahman moneylenders plenders and Government servants. The water-supply is from one hundred sweet draw-wells. The mamlatdar's office, the

¹ In a dirty room on the site of the palace lives Padshahmiya alias Fatedin Khan Tarin the seventh in descent from the original Jagirdar Shah Muhammad Khan Tarin, who received a part of Hubli about 1677. He maintains himself by tilling a Government field.

² In the centre of the gateway, where the halves of the shut door meet, a stone used to stand about six inches above ground. A few years ago, as it came in the way of carts, the stone was lowered to the level of the road. The poorer townspeople on festive days still pour milk over and otherwise worship this stone as the home of the guardian of the Bankápur entrance.

subordinate judge's court, and the municipal office are held in the fort. The fort had only one entrance towards the south-east with two doorways one inside the other. The outer doorway was pulled down about 1864. The inner gateway which has an arched roof and immovable doors alone remains. About 1840 on the east wall of the fort a small door was opened to allow the fort people to fetch water from a small pond. The fort walls are neither strong nor They look more like a large bastioned garden wall than a fort. Several parts of the wall were pulled down in 1854 and 1856 and the ditch near them filled. In 1874 and 1875, the north and north-west parts were pulled down and a public road made. About half of the line of wall remains much ruined. New Hubli had never either walls or arched gateways. The only gateway, a plain structure at the west or Old Hubli entrance, was pulled down in 1830. The new town has several entrances or agsis, the chief of which are the Bhandivád agsi on the east, the Bankapur agsi on the south, the Bomápur agsi on the west, and the Dhúrwar agsi on the north.

The original town built in 1727 by Majid Khán Dilávarjang Bahadur the Nawab of Savanur included six peths or sub-divisions Hiropeth, Rachanpeth, Linganpeth, Mangalvarpeth, Sidanpeth, and Kaulpeth. In time the limits of these sub-divisions were changed and parts of them came to be included in other subdivisions. Of the four city survey (1873-1882) sub-divisions A, B, C, and D, A includes the south-east of New Hubli and the lands of Bidanhal, Náráyanpur, Yellápur, Bomápur, and Virápur villages. Division A has thirty-seven streets and is peopled by Brahman priests, moneychangers, cloth dealers, Lingáyat merchants, shopkeepers, cotton dealers, weavers, husbandmen, and labourers; Musalman carpet and cloth weavers, labourers, and cultivators; Patvegar weavers of silk and cotton cloths; and a few Jain and Marátha cultivators and labourers. The chief objects are the head police station, the Robertson market, and temples of Vithoba, Venkatraman, and Rádhákrishna. Subdivision B forms the town of Old Hubli. It is described later Sub-division C includes parts of the lands of the villages of Marian-Timságar, Nágsettikop, and Múdináikan-Arlikatti, and lies to the north-east of New Hubli fort. To the north of this subdivision are the German Mission house, church, and school-house. In the streets close to these buildings, live native converts many of them weavers, some gold and coppersmiths carpenters and labourers, some cultivators, and some of the workers in the Southern Maratha Spinning and Weaving mill. To the west of the mission buildings is the Southern Maratha Spinning and Weaving factory and to the cast a cotton cleaning and pressing factory, and travellers' bungalow, and some private bungalows, and gardens. Further to the south are two public rest-houses, one built out of local funds, and the other built about 1840 by a rich merchant and endowed by Government with a piece of rent-free land. Further to the south are Gurshidappa's Math, the chief Lingayat monastery,

Places.
HUBLI.
New Hubli Fort.

Sub-Divisions.

¹ The Bhandivad and Bankapur ages take their name from the towns of Bhandivad and Bankapur to which they lead. Bomapur takes its name from the old village of Bomapur on whose lands it was built in 1727.

Places.
HUBLI.
Sub-Divisions.

and the large reservoir known as Gurshidappa's Honda. To the south and west of the monastery and reservoir fifteen chief streets of the native town form part of sub-division C. The chief inhabitants are Jain traders in copper and brass vessels, merchants, cultivators, and labourers; Musalmán copper and brass vessel makers, cultivators, and labourers; Lingáyat cultivators, oil pressers, and weavers; blacksmiths, Jingar saddlers, and Patvegar weavers in silk and cotton. To the south of these is a large stone temple of Hanumán built by a tailor.

Sub-division D stands on parts of the lands of Mádináikau-Arlikatti, Keshavpur, and Nágsettikop and includes in the middle the fort of New Hubli. To the north of sub-division D are the bungalows of the First Assistant Collector and the Cotton Inspector, the Electric Telegraph office, and the new court-house, near which a new sub-divisional office is to be built. This sub-division has thirty-three chief streets forming part of the native town. Of the people of sub-division D, Marátha cultivators, labourers, and messengers live round the fort, and Patvegar weavers in silk and cotton Musalmán cultivators, labourers, weavers in cotton and silk, Vaddar stonecutters, shepherds, Biádarus, Lingáyat merchants, cultivators, labourers, weavers, and priests, pot makers, basket makers, some Bráhman priests public servants moneychangers, Jains and Gaulis inhabit the rest of the sub-division.

Sub-division B includes the fort and town of Old Hubli. It covers land belonging to the villages of Krishnapur, Ayodhia, Marian-Timságar, and Bomápur, on the west of New Hubli. The town consists of three parts with about forty chief streets. Of the people of sub-division B, Bráhman priests and village officers live in the fort; a few poor Bráhman moneychangers live in the town; Lingáyat merchants husbandmen and labourers, Musalmán weavers, Holerus, and shoemakers live in Krishnapur, and Hatkars or Devang weavers abound in Chennapeth. In Vilhalpeth live a few landholding Maráthás and a few Bráhmans and in Berband street a large number of Musalmáns as well as a few Maráthás Lingáyats and Sungars or lime-burners. The whole town looks more like a large village, with crooked narrow and dirty lanes, and bad roads, with half-fallen and otherwise ruinous small flatroofed houses along their sides. Vithalpeth has a Roman Catholic chapel where services are occasionally held by a priest from Dhárwár.

Population.

In 1872 Hubli had a population of 37,961 of whom 26,554 were Hindus, 11,270 Musalmans, and 137 Christians. The 1881 census showed a decrease of 1284 that is to 36,677 of whom 25,471 were Hindus, 10,902 Musalmans, 298 Christians, and six Pársis. The opening of the Marmagoa-Belári railway with a large station at Hubli, is likely to increase the importance of Hubli as a trade centre and to add to its population. The following is a short summary of the present strength and condition of the different classes in Hubli:

Priests.

Priests of whom there are about 250 families, are found in all parts of the city. They are of two main classes, Hindus and Musal-

máns. Among Hindu priests are about eighty Bráhmans, eighty Lingáyats, and three goldsmiths. The number of Musalmán priests is about eighty. Of the Bráhman priests some are attached to families as family priests and officiate at all their religious ceremonies. Some are temple priests, others are holders of rent-free lands, and the rest are religious beggars. Four or five are well off and able to save, and occasionally lend money. Many send their boys to school to learn Kánarese, Maráthi, Sanskrit, and English, and several of them strive to get their sons into Government service. They live chiefly in New Hubli, in Mangalvárpeth, Valvekar and Beláriavar streets, and also in Old Hubli. Some Lingáyat priests hold rent-free lands and others live on alms. Of the Musalmán religious officers some are Kázis, Mullás, Khatibs, and mosque servants, who hold rent-free lands; the rest live on alms.

Lawyers or Vakils of whom there are eight families of Mádhva and Konkanasth Bráhmans live in different parts of New Hubli. Three of them are rich and save; the rest just maintain themselves. Their boys go to school and learn Maráthi, Kánarese, or English. A son of one of the Vakils has risen to be a subordinate judge.

Government servants numbering about 426 include all the paid servants, kárkuns or vernacular clerks, messengers, bailiffs, and other paid servants in the sub-judge's court, and in the revenue, police, and municipal offices. They live in all parts of the town and are Bráhmans of different sects, Maráthás, Lingáyats, and Musalmáns. Of the Bráhmans some hold high places in the revenue, judicial, police, and educational branches of the service. Others are clerks and a few are messengers and constables. Of Maráthás one is an assistant surgeon in the Hubli dispensary and the rest are messengers and constables. One Lingáyat is a municipal overseer. Other Lingáyats are kárkuns in public offices and schoolmasters. Of Musalmáns one is the Názir of the sub-judge's court another a head constable and the rest are messengers and constables. Of Government servants only those in high positions are able to save. All but a few messengers and constables send their boys to school.

Besides the assistant surgeon and his servants there are about eighty-five country practitioners. About twenty Musalmans who live in the Musalman quarter of the city prescribe for ordinary diseases, while one of them has a large practice and treats difficult cases. Fifteen Lingayats treat ordinary cases of fever and live in all quarters of the town. Six Brahmans, ten Marathas, eight Chetris, and six Jains also give medicines in cases of ordinary sickness. The Hindu leeches are called Vaidyas and the Musalman leeches Hakims. They are generally paid about 6d. (4 as.) a visit, besides the price of the medicine, and a present of two shillings to two pounds (Rs. 1 - 20) when the patient is cured. The assistant surgeon performs all difficult operations and when sickness grows serious most people who can afford it call him in.

Of men of means there are about 100. About twenty are landholders including desdis, deshpandes, inamdars, and Government servants. Of the landholders some are Brahmans and some Lingayats

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and the rest are Musalmans. Partly from the number of dependants and partly from the large sums they spend on marriages and other ceremonies men of this class are badly off and some of them are in debt. They send their boys to school. Among Government pensioners are three Brahmans and one Musalman. They are well-to-dr and educate their children chiefly for Government service.

Moneylenders.

Of moneylenders the chief are Brahmans, Lingayats, and Mar. waris. The Brahman moneylenders number eighteen families of whom about fifteen are settled in New Hubli and three in Old Hubli. Some of them have capitals of £1000 to £10,000 (Rs. 10,000. Rs. 1,00,000), and three have between £1000 and £2000 (Rs. 10,000. Rs. 20,000). They lend money to traders husbandmen and brass workers chiefly for trade purposes and sometimes to meet marriage and other special expenses. If the borrowers are men of credit advances are made on personal security, otherwise land, houses, and ornaments are taken as security for loans. The yearly rates of interest are nine to twelve per cent when gold and silver ornaments are pledged, and twenty-four to thirty-six per cent on personal Except when gold and silver are pledged bonds are always taken. Most moneylenders keep day and ledger books. Though they often take their debtors into the civil court, they bear a good name for patience and fair dealing. There are about thirty Marwari moneylenders in New Hubli. They are most hardworking, sober, and thrifty, but very harsh and grasping. They are well off some of them with capitals of £5000 to £10,000 (Rs. 50,000-Rs. 1.00,000). Their boys go to school from seven to sixteen and learn Kánarese and English at school and Márwári at home. They make advances to traders and others like. other moneylenders but more carefully. They never, if they can avoid it, take houses and fields in mortgage. As creditors they have a bad name for harsh and unscrupulous, if not dishonest, practices. Besides professional moneylenders some poor people of all castes lend small sums of money varying from Re. 1 to Rs. 20 at a monthly rate of $\frac{1}{12}$ - $\frac{1}{2}$ a. the rupee that is about 11 to six per cent a month. Moneylenders' clerks are almost all Bráhmans and Lingáyats. They write Maráthi and Kánarese and are paid 16s. to £5 (Rs. 8-50) a month.

Moneychangers.

Moneychangers or saráfs, numbering about forty-two houses, are Bráhmans of different sects settled in New Hubli. They are patient, thrifty, and fairly off with capitals of £10 to £100 (Rs. 100-1000). Their boys go to school where many learn English. The moneychanger sits in his shop or by the roadside, buying and selling ornaments, and changing copper and silver coins. Those who sit by the roadside are called Chinvars. They give copper for silver and silver for copper and charge a fee of ½ a. or half a farthing on every two shillings exchanged. Shells or kaudis are not in use. Besides the Bráhmans one or two Patvegars earn their living as moneychangers.

Grain Dealers.

Grain-dealers chiefly Lingáyats number about eighty-seven families and are found all over the town. About ten Brahmans, three or four Musalmans, and three or four Maráthas also deal in grain. Besides these, men of all castes sell grain on market days. The grain-

dealers are either wholesale or retail. The wholesale merchants, of whom there are about ten Lingáyats and ten Bráhmans, are rich, buying grain in large quantities chiefly rice, wheat, and millets, and selling it to retail sellers. Their boys go to school. The retail grain-dealers, who are chiefly Lingáyats, are found in New Hubli. They often carry on their trade with the help of borrowed capital. The wives of some Lingáyats sell in their shops, and only a few of their boys go to school. They buy partly from husbandmen in the market and partly from wholesale grain-dealers.

Vegetable-sellers, of whom about fifty-five houses are in the Bágwáns' or vegetable seller's street in Peth Majidpur, except two Lingáyats, are all Musalmáns. They are hardworking thrifty and sober. As a class they are poor, living from hand to mouth, in houses with a yearly rent of 12s. to 16s. (Rs. 6-8). Their wives work as saleswomen and none of their boys go to school. Some grow vegetables, others buy from gardeners. They sell to consumers and to the surrounding villagers who retail the vegetables in their Headloads of fuel are brought in the morning by Pendhári, Biádaru, Holeru, and other women. Headloads of grass are brought in the evening by women belonging to the cultivating and gardening classes. The grass is their own property or bought from wholesale sellers. It is stacked in large heaps or banaviks (K.) outside of the town. These grass stacks are generally the property of large dealers who buy entire meadows or kávlás (K.). Biádarus and Holerus bring firewood six or eight miles and do not get more than 41d. (3 as.) the headload. A number of cultivating women bring headloads of cow and buffalo dung cakes and sell them at about twenty cakes for a 1 anna or 11 farthing. None of the retail grass and fuel dealers are well-to-do.

Sugar and spice dealers are of two classes wholesale and retail. The wholesale dealers number about twenty-five houses. They live both in the new and old towns and are Bráhmans, Lingáyats, Jains, Komtis, and Devangs. They are thrifty, sober, hardworking, and well-to-do with capitals of £10 to £5000 (Rs. 100 - 50,000). They bring spices and sugar from Bombay, Belári, Bangalor, and Kárwár and sell to retail dealers. Of retail sugar and spice dealers there are about seventy-five houses chiefly Lingáyats, Komtis, Jains, and Devangs. Some retail dealers are well off. Their capitals vary from £10 to £20 (Rs. 100 - 200). Their women sometimes sell in shops. They buy from wholesale dealers and sell to consumers.

Hubli has no separate salt-dealers. Dealers in grain, sugar, and spices also deal in salt. The salt comes from Vengurla and Kárwár in carts and on bullock back. The wives of some of the retail traders sell salt in the market to consumers and make about 3d. (2 as.) a day.

About ninety Lingáyat families, in all parts of the town, are oil pressers and sellers. Each family has an oil press in its house, in which sweet oil is pressed from the seeds of the yellu and gurellu varieties of sesame, pundi or hemp seed, agsi or linseed, and nelagudi or groundnut. Wholesale oil sellers buy some of these oils, as well as large quantities brought from Barsi and Vairag in Sholapur and retail it. Their wives sell oil in their own houses or in the market. Kerosine

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Sugar and Spice Dealers,

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oil has of late greatly interfered with the sale of country oil. Almost every shopkeeper in the city and every other person who has a few rupees to spare, imports and retails kerosine oil. Even some professional oil-pressers buy kerosine to maintain their trade. The competition of kerosine has forced some oilmen to give up their hereditary calling and take to new pursuits and a few have been ruined,

Butter Sellera.

Butter-sellers, Gavlis by caste, have about twenty-seven houses and live both in Old and New Hubli. Their women sell butter, curds, and milk. As the local butter supply is not enough for the wants of the town, on market day large quantities are brought in by Hinda women from the surrounding villages in small earthen jars or chalgis. As the Gavlis mix the buttermilk with water, Bráhmans, Lingáyats, Jains, Komtis, and Rajputs do not buy from them. Grain and spice dealers also buy a good deal of butter on market days, clarify it, and keep it in large round earthen jars or kodás and retail it.

Milk Sellers.

Hubli has no separate class of milk-sellers. The milk is sold by Gavlis as well as by several women of the labouring and cultivating classes who keep one or more buffaloes.

Liquor Sellers.

The liquor contract of the sub-division has been farmed for £3400 (Rs. 34,000) for the year 1883-84. The farmers make country liquor in their distillery in the west of the new town and sell it in four retail shops at about 1s. 3d. (10 as.) a bottle. The right of tapping palms for toddy in the Hubli sub-division has been farmed for £1050 (Rs. 10,500) for the year 1883-84. Except Bráhmans Lingáyats Komtis and Jains all classes openly drink country liquor and palm-juice. The chief consumers are Musalmans Holerus Biddarus and other low caste Hindus. European liquor is not imported in any large quantity. Musalmans and other consumers, when they want it, get small quantities from Dhárwár.

Cloth Sellers.

Sellers of cotton, wool, and silk cloth, Bráhmans, Lingúyats, Musalmáns, Shimpis, Patvegars, and Sális by caste, number about 660 houses. They live in all parts of the town. Many of them are wholesale traders with capitals of £500 to £5000 (Rs. 5000 - 50,000). The rest have little capital and carry on their business on borrowed funds. Their women do nothing but house work and most of their boys learn to read and write. They sell both handloom and steammade cloths and besides importing from Bombay, Belári, Bangalor, Gadag, and Belgaum, employ handloom weavers of Hubli and the surrounding villages. They sell the cloth to retail dealers and The retail sellers are about fifty tailors and about fifty consumers. Lingayats. The woollen cloth is chiefly flannel and broadcloth brought from Bombay and used by Government servants lawyers and other rich people. White blankets or dháblis are much in use. Silk waistcloths bodices and handkerchiefs are brought from Bombay and Poona and sold to almost all the rich and middle classes, who buy them for weddings and on other festive occasions. Besides by regular dealers, cotton cloth and silk are sold by tailors. and Patvegars also sell the produce of their looms in the market on Saturdays. Rough blankets or kambals are brought from the neighbouring villages and sold by shepherd weavers.

Ornament-sellers, of whom there are about twenty-three houses both in the old and new towns, include fifteen saráfs or money-changers and eight goldsmiths. Glass bangles are sold by Baligararus some of whom are Musalmáns and bring bangles from Bombay and also make and sell lac bracelets.

Animal-sollers number about sixty-eight houses. About fifteen of them are Lingáyats, five Maráthás, twenty-five Musalmáns, fifteen Jains, and eight Biádarus. As a class they are poor. They bring cows, bullocks, buffaloes, ponies, sheep, and goats from the surrounding villages and from Navalgund and Ránebennur and offer them for sale on market days. The bullocks and buffaloes cost £2 to £8 (Rs. 20-80), the cows £2 to £4 (Rs. 20-40), and the sheep 2s. to 8s. (Rs. 1-4). Some Maisur dealers bring valuable Maisur bullocks and cows worth £9 to £28 (Rs. 90-280) a head.

Almost all sellers of native house gear, earthen pots, wooden boxes, bedsteads, stools, carpets, and mats, are makers as well as sellers. They live both in the old and in the new town. Musalmans, a few Marathas, Lingayats, and Panchals make brass and copper vessels, which are largely used at Hubli and the rest are sent to Poona, Sholapur, Belari, Maisur, and Kanara by Jain Bogars. Couches, chairs, and other articles of European furniture are not made at Hubli.

Besides sugar, sugarcandy, almonds, raisins, and furniture, the Bombay Musalmán shopkeepers of Hubli sell drugs, hardware, paper, and almost all European articles except liquor.

Of seventy-five brokers, thirty are Lingayats, fifteen Brahmans, fifteen Musalmans, ten Marathas, and five Jains. They are employed in all kinds of transactions between sellers and buyers.

Husbandmen, Lingáyats, Maráthás, gardeners, Kurubars, Holerus, and Musalmáns, with about 400 houses, are found in all parts of the city. They are hardworking and sober. Except in ploughing and working the water-bag, the women help in almost every field process. Boys over eight are too useful in minding cattle and watching fields to be spared to attend school. They have generally two or four pairs of bullocks. Some employ Maráthás Lingáyats and Mhárs as farm servants. Four or five have rich watered land well tilled and yielding valuable crops and several are in debt. The chief fruit and vegetable growers are Lingáyats and gardeners.

About twenty-two families of Jains, Maráthás, and Komtis roast Cicer arietinum or kadli pulse, and separate the inner split parts called puthani, from the bran. They sell the roasted gram to consumers and export large quantities to Dhárwár, Belári, Kánara, and Ránebennur. The bran is sold as cattle food. A measured sher of kadli weighs about three and a half pounds and costs 3d. (2 as.). When roasted and prepared it yields about two and a half pounds of puthani which is sold for about 4½d. (3 as.), leaving a profit of 1½d. (1 a.) in working one sher or three and a half pounds of kadli. Rice is also roasted and made into three kinds of eatables avalakki, churmuri, and aralu. None of these varieties is made at Hubli.

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Grain Roasters,

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Ready-made avalakki is imported from Misrikot village about nine miles to the south-west, and churmuri is largely imported from Nandgad in Belgaum and Haliyal in North Kanara.

Population.

Butchers number about eighty families, fifty of them Hindu Lads and thirty Musalmans. Of the Musalmans some are mutton and the rest beef butchers. About ten Lad and thirty Musalman butchers live in Old Hubli and about forty Lads live in different parts of New Hubli. Gulkava's pond to the north of New Hubli where the New Hubli Lads slaughter their sheep. If they can avoid it, Hindus do not

Fishermen,

Fishermen number about twenty-two families ten of whom are Musalmáns and the rest Bhois. They are fond of liquor and are poor, making about 6d. (4 as.) a day. When wanted the men also carry palanguins and several of the women sell dried fish brought from the neighbouring Portuguese territory.

Poulterers.

Hens and eggs are sold by Musalmans, Maráthas, Koravarus, and Vaddars, both in the market and at their houses.

Stone-cutters. Stone-cutters, or Kallukatakarus, number about fifty families of Panchals, Marathas, Musalmans, and Kurubarus. They earn 1s. to 2s. (Re. ½-1) a day. They carve stone pillars and stone idols, and make ashikallu and gundakallu or chilly and spice pounding and grinding stones. Their women gather and sell dry cowding and carry bricks and tiles. The men also quarry stones and bring and sell them in the town.

Brick Makers.

Brick-makers number ten of whom five are Lingdyats and five Musalmans. Some live in the old and others in the new town. They make burnt bricks and red tiles, both within and outside of the town. Good bricks are sold at about 14s. (Rs. 7) a thousand and small tiles sell at 5s. to 7s. (Rs. 21 - 31) the thousand. With the help of their wives, they gather rubbish for kilns and bring it either on their own heads or in carts. They make no earthenware. Sundried bricks are made by the labouring classes and sold at 6s. to 8s.

Carpenters.

Carpenters numbering eighty-one houses are found in all parts of, Hubli, but chiefly in the carpenter's street in the new town. About sixty of them are Páncháls, ten Musalmáns, ten Maráthás, and one is a Linguyat. They have no capital. Their wages vary from 6d, to 2s. (Re. 4-1) a day. The demand for their work is always great as the town is growing and several new houses are always being built. Except by minding the house and spinning a little yarn, the wives do not help their husbands.

Painters,

Painters, that is Chitragars or Jingars, number about fifty houses all in New Hubli. They adorn house fronts with well drawn and well coloured figures and also draw figures on paper. They paint's contained and raint and call them. Ganpati and paint and sell them. They also make children's caps

and ornamental cars of paper and tinsel. The women draw flowers and figures some of them with great taste on women's robes and bodices with a strong paint which does not fade when washed. This process of painting is called chándrahákon.

Wool is not woven in Hubli. The blankets which are sold in the market come from the neighbouring villages. Cotton and silk weavers number 1425 families of whom 500 families are Patvegars, 300 Devangs, 250 Musalmans, 200 Salis, 150 Lingayats, and twenty-five Native Christians. Many of them live in their own houses and others in lodgings paying a yearly rent of £1 to £6 (Rs.10-60). them have capitals of £10 to £2000 (Rs. 100 - Rs. 20,000). carry on their work by borrowed money and earn 6d.to2s. (Re. 1-1) a day. The women, who arrange the threads and do almost every part of the process including weaving, earn 6d. to 1s. (4-8 as.) a day. Children are early useful and are seldom spared to go to The weaving classes suffered much during the 1876-78 school. famine, but are again (1881) well employed. Momins or Musalman weavers live in large numbers in Old Hubli. The women help and the boys are too useful to be spared to go to school.

Tailors or Shimpigerus number about ninety houses. Most of them live in the middle of the new town and a few in the old town. They make and sell clothes and are mostly poor. Tailors have steady employment, but have a bad name for stealing part of the cloth given them to sew. Men earn 6d. to 2s. (Re. \frac{1}{4}-1) and women 3d. to 6d. (2-4 as.) a day and their boys go to school.

Leather-workers, numbering about 150 houses, belong to four classes, Holerus, Madigerus, Dhorarus, and Mochigararus all of whom live in the outskirts of the town. The Holerus remove carcasses of cattle from the town and sell the skins to Dhors, who tan and colour them. The Madigorus buy uncoloured skins and make leather ropes and water bags. The Mochigararus make shoes and sandals. All four classes are dirty, quarrelsome, and fond of amusement. They are free from debt and live in small houses. One Dhor has a capital of about £500 (Rs. 5000) and lives in a house worth a yearly rent of £2 (Rs. 20). He is able to read and write, and, owing to his knowledge of astrology and power of scaring evil spirits, his services are in great demand and are well paid. All four classes have steady employment. The men earn 6d. (4 as.) and the women 3d. (2 as.) a day. Boys help after they are ten years old and some of them go to school. The Madigerus and Mochigararus sell part of their wares in the market and the rest in their houses.

Ornament-makers are chiefly goldsmiths of whom about 130 families are settled in Hubli. They are fairly sober and hardworking but have a bad name for cheating and for delaying work. When at work they earn about 2s. (Re. 1) a day, but their work is not constant. They make gold and silver ornaments to order and a few make brass and copper images. Goldsmiths are paid for gold work from 1½d. to 1s. (1-8 as.) and sometimes as high as 2s. (Re. 1) the tola or rupee weight of gold and for silver work ¾d. to 6d. (½-4 as.) the tola.

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Population.

Weavers.

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Leather Workers.

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Yarakadayarus, or casiers, numbering about sixty houses, live in the west and north of the new town and all over the old form Besides belimetal brass and copper images they make belimetal Desides being which are worn by all classes of women except Brillians. They are fairly off and have slops. The women wavept the house and sometimes help the men in their work.

Brass and Copper Workers.

Brass and copper work is a most prosperous industry in Hubli, It supports about 350 houses. The workers are of four classes when Demonstrates are of four classes. Pánchals, Masalmáns, Maráthás, and Kurnbars. The Páncháls or Kanchagars numbering about fifty houses live in the north west and south of the new town and in several parts of the old town. The And south of the new town and in soveral parts of the old town. The first of the last town and first in both New and the parts of the last town. Old Hubli. The Marathas number seventy-five and the Kurubar Use Linear Thomas names soventy-nyo and the Auracars and Landau Landau Thomas name mails on facting an manning day. twenty-nve houses. Doth cineses are interngent skinin source many houses worth a rearly rout of \$1 to \$16. They live in their own houses worth a yearly rent of £1 to £10 (Rs. 10-100) and are free from debt. Some of them have capital and buy brass and copper. Others work for hire. They get much bourle and council to £1 (3 ag. Rg. 10) a day. Besides brass bra vessels, bowls, and cups they make beautifully inraed and polished images and ornaments. Visitors to Hubli take with thom some bruss ornaments or vessels, and Hubli brass work is in demand as far ormaments or vesseis, and more orms work is in demand as Sholdpur, Belári, Kadapa, Bangalor, Maisur, Shimoga, Udpi, pha Dánahála and a bardworking as Onompur, Demri, Andapa, Dangator, Mussur, Onimoga, Cupi, Hondvar, Kumta, and even Goa. The Panchals are a hardworking clover and prosperous class and do not drink liquor. They are clover and prosperous cases and up now arms inquor, they are recommendations and are well-todo. They live in hired houses at yearly rents of £1 to £10 (Rs. 10-100). They make small and beautifully polished articles of brass or bollmotal which is made by mixing a little zine and copper with

Iron Workers.

Iron-workers numbering about fifty houses are of five classes Kambars or Panchals, Marathas, Lingastats, Musalman Nalbands, Kambara with about there and Vellals or Madras blacksmiths. Kambars with about thirty houses are dirty, hardworking, and fairly thrifty. The Nalbands of thom are in data of the women shoo horses and bullocks. Most of them are in debt. The women help by blowing the bellows and sometimes by working in the fields on their own account or for hire. Their daily carnings are not more than 6d. to 2s. (Re. 1-1). They make hooks, nails, and iron bands, links for swinging cots and cradles, iron baskets, buckets, and large sugarcano paus, field tools, stone chisels, and commettion of change English handman has considered the commetter of change English handman has considered the contract to the commetter of change English handman has considered the contract to the contr The competition of cheap English hardware has greatly reduced the demand for their work and presses heavily on them, Twenty persons trade but do not work in iron.

Basket Makers,

Basket-makers, Myadars by caste, numbering about forty families are all settled in Kaulpeth and Yellapur streets in the new town. They are well employed but are fond of liquor and amusement quarrelsome and unthrifty. They buy bamboos brought from Yellapur in North Kanara and make baskets, matting, and wicker the woman do manily as small words as the man Rabwann Work. The women do nearly as much work as the men. Between thom a husband and a wife earn about 72d. (5 as.) a day.

Barbers or Navaligerus, with about sixty-five houses, are of four classes Maráthás, Musalmáns, Lingáyats, and Telingas. The Maráthás with twenty-five houses live round the new fort. About eight Musalmáns live in the Musalmán quarters in the west of the new town. Lingáyats with twenty houses are scattered all over Old and New Hubli. Telingas from Belári have twelve houses four of them in the new and eight in the old town. As a class barbers are hardworking, sober, and thrifty. Besides shaving for which they charge \$\frac{1}{2}d\$. to \$3d\$. (\frac{1}{2}-2 as.), four of the Marátha barbers act as torch-bearers.

Washermen or Agasarus number eighty houses sixty of them Maráthás fourteen Musalmáns and six Lingáyats. They are hardworking, sober, thrifty, and free from debt. They wash all clothes and have constant work. With their wives' help they earn about 6d. (4 as.) a day.

Bedar labourers with 133 families are settled in all parts of New Hubli. They live in small tiled or thatched houses. Both men and women act as labourers. During the tamarind season they gather the ripe fruit and separate the pulp from the berries. The pulp they sell to shopkeepers and consumers, and the berries to blanket makers. When they are in season they bring and sell mangoes and guavas. At other times they bring firewood, and banian and muttala or Butea frondosa leaves from the forests and sell them to townspeople, the banian leaves as fuel, and the muttala leaves for dining plates and cups. Every January the Bedars go out for a hunt. Both men and women are quarrelsome and fond of liquor. They have given up robbing and open violence but still steal and are under the eye of the police.

Labourers chiefly Lingayats, Marathas, Rajputs, Kurubars, Musalmans, Bedars, and Mhars with 350 families live in all parts of the town. When other work fails the destitute of almost all classes take to labour.

Field-workers, generally Lingúyat, Marátha, and Musalmán women, earn 3d. (2 as.) a day for weeding, and in harvest time are paid five or six sheaves out of every hundred. By grinding grain and pounding rice poor women of almost all classes make $2 \nmid d$, to 3d. $(1 \nmid -2 \text{ as.})$ a day.

Carriers of bundles, chiefly Jains, Kurubars, Lingayats, Marathas, and Musalmans, are paid 1½d. (1 a.) for a trip to any part of the town and 3d. (2 as.) a mile outside of the town within municipal limits. A superior class of carriors known as Mattigars or load carriers, store grain, load and unload carts, and get 6d. (4 as.) a day for their labour. There is a considerable demand for labour in the Southern Maratha Spinning and Weaving Mill, on the earth-work of the Goa railway, and on the public roads. The labourers are chiefly Holerus, Bedars, Musalmans, Marathas, and Lingayats. Men carn 6d. (4 as.) a day, women 3d. (2 as.), and children 2½d. (1½ as.). House building causes a considerable demand for unskilled labour in making coment and helping the bricklayers and masons.

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Washermen.

Bedars.

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The ordinary day's wages are 6d. (4 as.) for a man and 3d. (2 as.) for a woman. Every year before the rains set in, the spreading of pond silt on flat-roofed houses and tile-turning employ a large number of Lingáyat Marátha Kurubar and Jain labourers.

Hubli has no resident animal-trainers but several Muhammadans occasionally visit the town with trained serpents fighting with mungooses. Markthas bring performing or misshappen bullocks and go about showing them in the town and get a pice or two (%d.) from each house.

Athletes.

There are two Musalman resident athletes. On fairs and other festive occasions young men of the Maratha Linguyat Musalman Bedar and Kurubar castes, perform athletic exercises and wrestle with each other in public.

Religious Beggars. Besides the large class of old destitute and idle of almost all castes, Hubli has two leading schools of ascetics, Sanyásis and Gosávis. About ten Lingáyat Sanyásis live in monasteries and go to Lingáyat houses for meals not more than twice a day. They wear red ochre-coloured clothes which are supplied to them by Lingáyats and consist of a blanket, two waist and two shoulder-cloths and two loincloths and a covering cloth to be used at night. They never cook and spend their time in bathing, praying, and expounding religious books. One of these Sanyásis is the head priest of the Mursavirad Math the chief Lingáyat monastery at Hubli. Only two Gosávi beggar families are settled at Hubli. They eat together but do not intermarry.

Pollers.

Of fifty-five carthenware-makers about twenty-five are Maráthás and thirty Lingáyats. They live in all parts of the old and new towns. They bring earth on asses from the large pond to the west of Old Hubli, and from it make all varieties of water, cooking, and eating vessels. They make tiles at about 14s. (Rs. 7) the thousand.

Cart Hirers.

About eighty-four families of Jains, Komtis, Lingáyats, Maráthás, Musalmáns, and Rajputs live upon letting their earts at 2s. to 4s. (Rs. 1-2) a day. For longer distances the payments are arranged by contract.

Comb Makers.

Hubli has sixty-one families of weaving comb makers,¹ of whom forty-one are Salis living in New Hubli, and twenty are Musalmans living in Old Hubli.

Betel Leaf Sellera. Betel-leaf sellers numbering about seventy-six families, of whom except two Lingáyats all are Musalmáns, are settled both in the old and in the new town. They buy betel leaves wholesale from Ránebennur, Háveri, Shiggaon, Sávanur, and Soratur, export a part to Nargund, Navalgund, Gadag, Dhárwár, and Belgaum, and retail the rest in Hubli. Their women help in turning and keeping the leaves clean, and selling them in their shops. Their net earnings are about £1 (Rs. 10) a month.

¹ Details of comb-making are given above under Industries.

About fifty Lingáyat, twenty-five Musalmán, ten Bráhman, ten Jain, and ten Marátha cooks live in Hubli. A few of them are employed on monthly wages, varying from 10s. to £1 4s. (Rs. 5-12). Others work on contract when large caste parties are given. The contract is made according to the class of dinner and the number of guests. A few cooks have families, but most are bachelors.

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About sixty Pendháris, all of them Musalmáns, let ponies on hire, and live in the northern and southern quarters of the new town. Some of them let ponies for hire at 1s. (8 as.) a day. For great distances they charge 6d. (4 as.) a kos of three miles. Such Pendháris as have no ponies bring headloads of firewood and grass and sell them.

Pony Hirers.

The Hubli municipality grants yearly licenses to four Lingáyat makers and sellers of snuff after levying on every license a duty of £1 10s. (Rs. 15).

Snuff Sellers.

Four Musalman Bhisti families carry water in large leather bags, on bullocks, and in smaller bags on their own hips. Their monthly wages are about £1 4s. (Rs. 12).

Bhistes.

Twenty Musalman and fifteen Lad perfumers prepare and sell native perfumes and flowers. Their net yearly gains are about £5 (Rs. 50).

Perfumera.

Thirty-two families trade in timber twenty-three of them Musalmáns, six Biádarus, and one each a Marátha, a Shimpi, and a Pánchál. They live both in the old and in the new town. They bring timber from the Government wood stores at Haliyál and Yellápur in North Kánara and retail it at Hubli. Much timber is also sent east to Madras and the Nizám's country. Their yearly profits vary from £10 to £50 (Rs. 100 - 500).

Timber Sellers.

About twenty families of Manigararus sell beads, small lookingglasses, threads, needles, small tin boxes, and wooden combs. About half of them are Telingas and the rest Musalmans. Their women besides minding the house sell in their shops. They are well-to-do and save on an average about £5 (Rs. 50) a year. Bead Sellers.

Kalaigars or tinners number nineteen families, fourteen of them Musalmans and five Rajputs. All live in New Hubli. The yearly profits of each family are about £10 (Rs. 100).

Tinners.

Ten Kurubars or shepherds bind blankets with silk or woollen thread. They are paid 1s. to 2s. (Re. 1-1) for each blanket. Their yearly profits are about £10 (Rs. 100). Their women help them in their work.

Blanket-binders.

Six Lingáyat families make and sell the white religious ashes called *vibhuti*. Their women help and their boys do not go to school. They are very poor.

White Ash-Makers.

Cotton dealers number about fifty families of whom fifteen are Lingáyats, fifteen Gujarátis, ten Bráhmans, five Jains, and five Musalmáns. Besides the cotton-dealers grain and other merchants who have a little spure money also trade in cotton.

Cotton Traders.

DISTRICTS.

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Cotton cleaners number thirty-six families all of whom are Musalmans. They tenso and clean cotton at a little less than a penny the pound (10 as. the man of twenty pounds), help by working the cotton into rolls about a foot long and half an inch thick, which the women of the cultivator class spin into

Indigo Dyers.

Indigo dyers number fifty-two families twenty of them Marathas, fifteen Musalmans, eight Patvegars, and nine Devangs. They dye yarn and cloth with indigo and their women help.

Cocoanul Sellers.

About twelve Lingdyat families import cocoanuts from Nandgad in Belganm and Haveri and Ranchennur in Dharwar, and sell them in Hubli at 1d. to 11d. (3-1a.) each.

Bangle Sellers.

Bangle-sellers number about twenty-six families in Now Habli, thirteen Jain and thirteen Musalman. They sell and fit on coloured The women help in glass bangles. The price of bangles varies according to quality and size from 4d. to 1d. (1-3 as.) a bangle. The women help the mon in selling the bangles.

Marriage Crown Makers.

Bhasing, literally brow-horn that is marriage-crown, makers number seven families of whom five are Musalmans and two Lingáyats. Lingáyat marriago crowns aro very large and omamental. They are of a light spongy plant called hulibendu which grows in water, and of coloured paper and tinsol. The price varies from 2s, to £1 (Rs. 1-10). They are poor and unable to save.

Dancing Girls.

Dancing and Singing Women number twenty-seven families of whom fifteen are Musalmans and twelve Hindus, like Hindus, bear Hindu names, and live in New Hubli. They sing Kanareso Marathi and Hindustani songs and dance in both the Karnatak and the Hindustani style. They are thrifty and well-to-do All of them dress with property worth £50 to £500 (Rs. 500 - 5000) living in houses Worth a yearly rent of £1 to £3 (Rs. 10-30) and saving. Their boys and girls go to school from soron to twelve, and learn to read and write. At home the girls learn to sing and dance. The number eighty families of Holerus, Kurubars, Lingúyats, Maráthás, and Rajputs. They do not save, and are not respected like the Prostitutes who cannot sing or dance dancing and singing girls. Their children go to school.

Farriers.

Farriers or Nalbands number sixty-three families fifty-three of them Musalmans, five Chitragars, and five Panchals.

Armourers.

Armourers or Sikligars number twenty-three families all of whom are Musalmans. They clean swords, sharpen knives, and grind razors. The charge for cleaning a sword is about is. (8 as.), and for sharpening a knife or a razor is \(\frac{1}{2} \), \(\frac{1}{2} \)-\(\frac{1}{2} \) as.\). Their

House Servants.

House Servants number about 420 families. carriage drivers, cowdang plasterers, cooks, and washermen. Their monthly wages vary from 8s, to 16s, (Rs. 4-8). About 200 of them are Musalmans, 100 Lingayats, fifty Jains, fifty Marathas, and 120

Ropo Makers number nine all of them Musalman families, four of whom live in the old and five in the new town. They make hemp ropes six to eighty feet long and of varying thickness. about three-quarters of an inch thick and eighty feet long tosts about 3. (Rs. 11). They are poor and unable to save.

Chapter XIV. Places. HUBLI,

Midwives number sixteen of whom about eight are Maráthás and eight Musalmans. They are wives of labourers and husbandmen and charge 4s. to 10s. (Rs. 2-5) for each lying-in. They also get the robe worn by the women whom they attend.

Mulwiver.

Silk Dyers number about 100 families all of the Patvegar caste. Raw silk is brought from Bombay by silk traders and sold to silk dyers who give it to Muhammadan women to wind round rollers. The silk is then doubled and twisted on a twisting wheel. The dyers soak the silk in a solution of lime-water and some other ingredient and make it white. They also dye silk in red and yellow and sell the dyed silk to weavers who make it into silk and silk and cotton cloths.

Silk Dyers.

Bamboo Sellers number twenty-two families. They bring bamboos wholesale from the Yellapur forests in North Kanara and retail them in Dhárwár at a yearly profit of about £10 (Rs. 100).

Bamboo Sellers

Tin Workers number four families all of whom are Rajputs. They make lanterns and small tin boxes. Glass and tin lanterns are sold at 6d. to 4s. (Re. 4-2). Their net yearly profits are about £10 (Rs. 100).

Tin Workers.

Tassel Makers or Patvegårs number ten families all of whom are Musalmans. They string gold ornaments on silk. They are hardworking but given to drink.

Tassel Malers.

Licensed tobacco sellers number twelve of whom eight are Lingayats, two Musalmans, and two Jains. Their women do not help in selling the tobacco, and their boys go to school.

Tohacco.

Redpowder Makers number fifteen families of Belári Shudras, who have established themselves at Hubli during the last thirty years. They make the redpowder with which unwidowed women mark their brows,1 Besides the redpowder made by these families, a large quantity of inferior redpowder is brought from Bombay and Poona by spice merchants.

Redpowder

Fruit Sellers number about thirty families, Musalmans, Marathas, and Byádarus. They sell guavas, mangoes, lemons, and raw giuger, both in the market and at their houses. They are poor, but free from dobt.

Makers.

Hubli is the chief Dhárwár station of the Basel German Mission.2 It was established in 1839, has two outstations at Unkal Truit Sellers.

Christians.

¹ See above under Industries.

The other stations are Dhirwir begun in 1837, with an out-station at Jodehalli and two missionalies and one mission lady; Gadag-Betgeri begun in 1841 with outand two missionales and one mission lady; Galeigenergen began in 1971 with other stations at Shigoti and Malsamudra and two missionaries and two mission ladies; Calledgud in South Bijapur began in 1831 with ten out-stations and two mission and one mission lady. The mission have eight churches where service is held in Kanarese. Of 1351 Native Christians under the mission 747 are adults and 604 are children. Of the whole number six were converted by the London missionaries

Places.
Heres.
Christians.

on the Dharwar-Hubli road and at Hobsur on the Dharwar-Godz road and has two missionaries and one mission lady. The Hobs settlement numbers 317 Christians, 178 adults and 139 children, at of whom live in separate houses close to the mission houses and maintain themselves by labour. A large number weave and some are employed in the Southern Marátha Spinning and Westian factory. Some cultivate while some are goldsmiths, coppersmiths, carpenters, and labourers. At Hubli the mission has one bops' school with sixty-three boys and one girls' school with thirteer, boys and twelve girls. The mission buildings at Hubli include two mission houses, two churches, two catechists' houses, and fire school houses,

Parrie.

Three Parsis are settled in Hubli two with and one without their families. All are well-to-do. One is the agent and another as assistant in a cotton press, and the third is a carding master in the Southern Marátha Spinning and Weaving mill.

Houses.

The 1881 census returns showed 7468 houses 5563 in New Hubli and 1905 in Old Hubli. Of the 5563 New Hubli houses 2833 were of the better and 2730 of the proper sort; and of the 1903 in Oid Hubli 970 were good and 985 inferior. Of the 7468 house about 5000 were flat roofed and 2168 tiled. Thirty-seven were shrines or rest-houses and small Hindu temples, twenty-seven were hinging monasteries, and seventeen were morques. Of the 2893 better class houses of New Hubli about ten are large and substantisl buildings belonging to rich merchants and traders in copper and brass vessels. Of the 270 better class houses in Old Hubli three or four are large and substantial buildings belonging to merchant. One of them much out of repair belongs to the Deski of Old Hubit. Of the total number of better class houses there are about two three-storeged houses in Now Hubli and one three-storeged house in Old Hubli; and about forty-five two-storeyed houses in New Habli and about ten two-storeyed houses in Old Hubli. Besides these houses Hubli has thirteen bungalows outside of the town, seven of which are public or charitable buildings and six are private properly. The houses are short and clumsy with stone foundations and brick or mud walls. They are of two kinds, the old style of mud-roofed house and the new style of tile-roofed house. The old style of house has little provision for air or light and looks like a building with a roof and walls standing on wooden posts. Houses of this kind are built in continuous rows the wall of one usually three to four fect. thick often serving its neighbour on either side. The poor man's house usually includes a small katta or raised seat in front of the house, and inside, a small hall with one or sometimes two rooms on either side of it. Further in, is a cooking and dining room, with a place built of stone and lime for bathing, sometimes in the room and sometimes detached. Beyond at the back of the house is a

and 1315 by the German mission. A large number of converts were Lingsynts, and some were shepherds, coppersuit its, and goldeniths. Under the mission are fourteen echools where upwards of 500 boys and girls are being taught. Of the schools seven are for boys, two for girls, and five for boys and girls.

years.

yard with a well and a privy. The katta or front seat is generally used for an evening lounge, and for sleeping in the hot season. The inner hall is used for receiving friends, sleeping, storing grain, cotton, cotton seeds, molasses, and salt, and occasionally for dining. A rich man's house begins with a katta or raised seat outside of the front wall, which usually has a small door. The door leads to an open square with buildings on all sides. The central block of buildings, which is the chief part of the house, has the same arrangements as a poor man's house, except that there is a veranda, the divisions are more roomy, and the cook room is sometimes detached. The side blocks of the square are small buildings generally used by servants or as store rooms for articles of merchandise. The veranda of the central block is used for receiving men visitors, and the parlour inside the veranda for women visitors. The square in front is open at the top and admits light and air. Between these two specimens of rich and poor houses are numerous gradations. The fronts of all Hindu houses in Hubli are whitewashed, and three or four inch broad red stripes are drawn from top to bottom at equal distances. Every morning the threshold is washed with red coloured water and a space five or six feet square in front of it is cowdunged and on this space several ornamental mathematical figures are drawn by sprinkling on the ground powdered quartz called rangoli. A little turmeric and the redpowder or kunku, worn on their brows by unwidowed women,

Both the old and the new towns are most irregularly built. Except in a few places, where they have been widened by the municipality, the streets in the two towns are narrow crooked and winding. There is not a single long and straight street in either town. Within municipal limits is an estimated length of about twenty-eight miles of thoroughfare, of which about six miles are metalled and much of the rest is roughly made. Besides the north and south Dhárwár and Harihar road which skirts it on the west, and the Kárwár and Gadag road which skirts it on the north, New Hubli has three chief north and south roads. From the point where the north and south Dhárwár and Harihar main road turns west near the municipal toll station, a north and south line called the Dhárwár road runs into

are also sprinkled on the spot and sometimes some green and blue powders are strewn between the lines of the figures.² The front walls of all Musalman houses are first coloured red, and then white spots are made on them at irregular intervals with lime and water. Except two or three small and badly-kept mosques in the old town there is no trace that Musalmans held the town for about eighty

Chapter XIV.
Places.
HUDLI.
Houses.

Roads.

In most Hubli houses the roofs do not rest on the walls, but on posts built in the walls. Every veranda room and hall in a house is divided by partitions into rooms called thans or antanas. In the wall of each room about 34 foot from the ground is a niche about a foot wide, eighteen inches high and six inches deep, in which articles are kept. A little above the niche on each side is a wooden peg, on which turbans jackets men's or women's robes and other clothes are hung.

2 l'arther details of the use of quartz-powder or rángoli are given in Appendix D.

Chapter XIV.

Places. H_{UBLI} Roads.

the town and after passing Gurushiddappa's reservoir, under the name of Kanchagar street, winds to Bhuspell street, and then runs where it ining the Dillimate. Straight to the south end of the town, where it joins the Diarrate Prometha main and Diarrate Straight to the south one of the town, where it joins the Justian Kannaa and Cadaa mand macaa to the point where the Harihar line to Bankapur and Harihar. From the point where the travallars, humanlaw a road passes to the police station near the name of Aurwar and Gauss road enters the town under the name of the name o Dailba's street, and runs as far as the basket makers' houses where Lighton 8 street, and runs as are as the vasact makers abuses, where, and runs as far as the police station near the north-west angle of the fort. From the police station under the name of Bidder street, which was and making the name of Bidder street, and want and making the name of Bidder street, and want and the road runs south, intil it meets the great east and west road, antrance of the town on the most which runs from the Blandivid entrance of the town on the cast Which runs from the Dinnaival entrance of the town on the west. From this point the road turns a little to the West, skirts the north of the Robertson market through the cloth seller's street under the name of Market through the cloth seller's street under the name of that, under the names of the tailors, cotton cleaners, and shoe.

Room the country of the tailors, cotton cleaners, and shoe.

Rrow the makers streets, it reaches Yellapur Maruti's temple. temple it turns west and joins the Dharwar and Haribar road to the Karwar and Gadas road, south till it meets the Bhandirad wast street leaves the Bhandirad Another road called Ganesh Peth street runs from entrance street. Blandivad entrance of the town on the east, and crossing all the Dorth and south streets, and turning sometimes north and sometimes on the Personal Streets and turning sometimes at the track on the track only the track only the track only tr The great east and west street leaves the South leaches the Bomabur entrance of the town on the west and morning and and constrained of the town on the west and morning and and constrained and the following and constrained and the west and and constrained and the following and constrained and the following and constrained and the following and constrained and the following an goes on to Old Hubli. Besides these main hundreds of small narrow and winding lanes. Besides these main roads, the town has

Trade.

Hubli is one of the chiof trade centres in the Bombay Karnátak. Till 1838, when Belonum was made the head-quarters of a district, with the ananing of the Habli held the first place and this, with the opening of the first place and this, with the opening of the monage of the place and the monage of the place are the opening of the place are the opening of the place of the opening opening o Jarmagoa-Belgir, Leilmay, it mill bropapily testsing of late Acate the Tuning and the mass hace and the purity of the Acate the Tuning and the mass hace and the purity of the Acate the Tuning and the mass hace and the purity of the Acate the Tuning and the mass hace and the purity of the Acate the Tuning and the purity of the Acate the Tuning and the Acate the Tuning and the Acate the Tuning and Tuning a HERMINGUA-DURIN MALLEY, 16 WILL PRODUCTLY TEGALI. Of Land Junior and the Robertson Maritha markets, the German mission buildings, the Southern Maritha markets, the German mission buildings, the Doublern mission buildings, the Doublern mission buildings, the Doublern mission buildings, the Doublern mission for a court house and several large substantial dispensary, a post office, a court house, and several large substantial reasons. private houses have done much to improve the town. The only content of trade at Intrane nonces and monce and monce changes of trade at the first c Hubli are dealors in money and money-changers. Jears ago many gold and silver coins were current and their values changed from day to day to the great profit of the money dealers. The richer money dealers were the only persons who were able to with the introduction of the The richer money dealers were the only persons and cash bills of exchange. With the introduction of the and the teleprant, the luminess of the money dealers is gone. They und the telegraph, the business of the money dealers is gone. They used to correspond by post with Bombay, Poons, Haidarabad, Madras, Benares, Nagour, and Calentia to ascertain the rates of Madras, Benares, Nagpur, and Calcutta to ascertain the rates of months of their canital. With the introduction of the discount and made thirty to forty per cent profit on their capital.

Now the Government range is the only lamb tender and the old coing Now the Government rupes is the only legal tender and the old coins are extremely rare.

Panala remait range without the rupes of the old coins are extremely rare. Government unreason notes and nine-tenths of the money orders or now when any mine-tenths of the money orders or now were and nine-tenths of the money orders or now were and nine-tenths of the money orders or now were and nine-tenths of the money dealers. Government currency notes and nine-tenths of the money dealers? work is gone.

About 1870 the Bank of Bombay established a branch in New Hubli. As it was not found to pay, the branch was closed on the 1st of January 1881. It was reopened on the 1st of January 1882 and was again closed on the 31st of March 1884.

The staple of the trade is cotton. The leading exports are cotton, grain, cloth, hides, horns, and fat; the chief imports are Bombay and European machine made cloth, and plain and dyed silk and cotton thread, grain, indigo, molasses, eccoanuts, and salt. Estimates of the imports and products of Old and New Hubli framed by the chief local traders give for 1893 a total value of about £410,000 (Rs. 41,00,000) of which about £325,000 (Rs. 32,50,000) are imported and £85,000 (Rs. 8,50,000) are produced. Of the £325,000 (Rs. 32,50,000) imported about £185,000 (Rs. 13,80,000) to be sent clsewhere. The chief items of import are cloth estimated at £60,000 (Rs. 6,00,000), yarn at £50,000 (Rs. 5,00,000), rice wheat and jrári at £40,000 (Rs. 4,00,000) each, and silk at £30,000 (Rs. 3,00,000). The details are:

Hubli Trade, 1883 : Imports.

APTICLE.	Value	Used.	Exported	Arnely.	Value.	Used.	Exported.
Cleths I am bilk de 'ri Bice Wheat Radi or Gram Logal or Tar Molasses bugar	£ (20,000 (20,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000)	2 20,000	£ 40,000 20,000 10,000 10,000 20,660 20,660 20,600	Salt Chillies Putter Copper and Jirass Vessels Jiran Timber	. £ 5000 5000 5:00 10:000 2:00 2:00	£ 4000 2500 3600 1700 1700 1700	1000 2 00 2 00 7700 1000 1000

Of the estimated £85,000 (Rs. 8,50,000) worth of local products £60,000 (Rs. 6,00,000) are cloth, £20,000 (Rs. 2,00,000) are copper and brass vessels, and £5000 (Rs. 50,000) are of wood cradles, cots, boxes, and toys. The details are:

Hubli Trade, 1883: Manufactures.

Apricum	Value	Used.	Exported
Cloth Brues Vessele Copper and Brues Vessele Wood Work and Travelling is in screens	£ (0,000 20,000	2,00 5,00 50,600 E	£ 40.000 17,500 4000
Total .	85 010	23 500	£1,500
Add Imports	\$23,000	1650 41	134,000
Total Trade	101,000	2077,100	001,001

The Southern Maratha Spinning and Weaving Company, Limited, was formed and registered in September 1881 in Bombay. It is a joint stock limited liability company with a capital of £60,000 (Rs. 6 lálihs) divided into 2400 shares of £25 (Rs. 250) each, the secretaries and managers being Messrs. P. Chrystal & Company of Bombay and Hubli. All the shares are not yet taken though

Places.
HUBLI.
Trade.

Cotton Mill.

Chapter XIV.
Places.
Heres.
Cotton Mills.

up to date (May 1884) the results have been satisfactory. Of the chares taken 396 are held in the district, 110 are held in Gree Britain, and the remaining 700 in and near Bombry. When the capicle is fully subscribed, the building will be extended as originally planned and the 15,000 spindles which the engine is capable of driving will be completed. Twelve acres of favourably situated land were recured and the foundation stone of the mill was laid un the 1st of September 1852. In spite of the difficulty of bringise heavy machinery from Karwar by the Arbail pass, a one storered building, covering 4000 square yards and capable of holding 10,660 snindles besides the engine and baller house, was finished and the machinery got ready by the 2nd of September 1993 when work bema. The mill is worked by a 400 hor-a-power indicated compound regize by Hick Hargreaves & Company of Bolton which drives the 24 feet diameter fly-wheel fifty turns in the minute. In March 1884 4769 spindles were at work yielding a daily outturn of 1300 pounds of rarg. It is expected that by the end of June over 10,000 spindles will be at work. The machinery has all the latest improvement and is by the well known makers Messes. Platt Brothers & Company Divited, Oldham. The mill has much in its favour. The cotton growers the deer and more yarn is used in the country round than the mill can supply. The varu is olready in great favour with the dealers and weavers of Belgaum, Garlag, Banelsennur, and inest other local centres. Local, commonly called Kumta, cotton is found better suited for spinning than sow-ginned American. The factory (March 1884) gives employment to about 250 hands, men women and children chiefly Marathas, Linguyats, and Muralmans. The daily carning of the men vary from 6d, to be (4-8 as.), the women earn about 45d. (S as.), and boys and girls 3d. to 44d. (2-3 as.) a day. The call Luropeans at present on the staff are the manager and the engineer. During the cutton reason (February May) seven double roller muchine gins, each estimated to cost about £30 (Rs. 500), work at Hubli. Each gin can gin at a charge of 16s, (Rs. 8) ninety-ix many or 2658 pounds of local reed cotton in a day or about as much as 186 women with foot rollers. As the fibre is not injured in the process the cotton fetches a higher price than that cleaned in other gins. Hubli has two Na-myth's Patent Presses, each of which, when worked twelve hours a day, turns out 100 bales or 19,200 pounds of cotton, at a charge of Se. (Re. 4) for every fourteen mans or 1992 pounds of local or thirteen runns or 361 pounds of American cotton. The gins and presses are in the cotton factory buildings at Hubli, originally built by the Karwar Company, which, together with other buildings at Karwar and Gadag, have been bought by Messrs. Framji and Company of Madras for £15,000 (Rs. 1,50,000).

Store

The chief places of trade and business are the large street called Bhuspeth in the middle of the new town and Pyati or native market street in the old town. On both sides of Pyati street many new shops have lately been opened. They are covered verandas in front of the houses encased in planks or shutters which fit into sockets at the top and bottom and are grooved at the sides. The shutters are put up at night and cannot be taken down except by removing the central plank which is fastened by a padlock. Cloths of all kinds are sold in some of the shops by Brahmans Marwaris Shimpis and Lingayats. Besides cloth shops, there are shops of bankers, coppersmiths, blacksmiths, sweetment makers, dyers, grocers, spice sellers, snuff makers, perfamers, and hardware dealers or manigurs. In the mornings and evenings women, chiefly gardeners' wives, sit in front of many of the shops selling vegetables and fruit. Besides on the main market road Lingayat Komti and Maratha grocers and grain dealers have shops in different parts of the town.

The Robertson Market, in a central part of the new town said to be the finest market out of Bombay, was opened for use towards the end of 1874 at a cost of about £6500 (Rs. 65,000). The market has 261 stalls under one roof and all round the market place. It is intended in time to have a line of shops facing the central building. Thirty-seven of these shops have already been built by private persons on a plan laid down by the municipality. The total yearly municipal income from the Robertson Market and the neighbouring shops is £270 (Rs. 2700).

There are four municipal slaughter houses, three for sheep, one near Gulkaval's pond to the north of the new town, a second behind the dispensary close to the new town, and a third in Báburáv's field to the south of the old town. Close to the third is the cattle house.

Beef is sold in a few shops in Islámpur street in the old town. Mutton is sold in several places in the new town, chiefly in Linganpeth, Rachanpeth, Arcravoni, and Mangalvárpeth in Birband street and on the bank of the Hubli brook in Old Hubli. Dry fish is sold to the east of the Robertson market in Hirepeth street on market days by fish dealers. On all days of the week women of the Bhoi or riverinen easte hawk fresh fish from house to house.

Hubli is throughout the year the head-quarters of the chief revenue and police sub-divisional offices and the seat of a sub-judge's court. It has a municipality, a lock-up, a civil hospital, an anglo-vernacular and twelve vernacular schools, post and telegraph offices, and an Assistant Collector's and a travellers' bungalow.

The Hubli municipality was established in 1855. In 1883-84 it had an income of £3314 (Rs. 33,140) and an expenditure of £3252 (Rs. 32,520). The income is chiefly raised from actroi house and other direct taxes, and miscellaneous receipts. The chief items of expenditure are conservancy and sanitation and public works including roads and water-supply. Since its establishment the municipality has built thirteen public latrines and the Robertson market. At a cost of about £12,080 (Rs. 1,20,800) it has made twenty-eight miles of

Places.
Hubli.
Shops.

Robertson Market,

Slaughter Houses.

Reef Shops.

Managemen..

Municipality.

Chapter XIV.
Places.
Hunti.

Water Supply.

thoroughfare within municipal limits, of which about six are metalled, and it has improved the water-supply at a cost of £6950 (Rs. 69,500).

The chief water-supply is from Tirkárám's lake covering about fifty-nine acres to the north of the new town. The local story is that about 100 years ago a Rajput landholder named Tirkárám built a dam across a hollow between two mounds and turned the hollow into a pond. About 1840 Government onlarged the pour on its west side and built a strong embankment. In 1855 when the Hubli municipality was started, a second dam enclosing about five acres of additional ground between the two embankments was made to the west of and parallel to the old embankment. present Dharwar and Hariher main road passes along the new embankment, the eastern or pond side being fenced with three feet high stone pillars. In a large clean catchment basin the rain. water stands and deposits its silt and the clear water runs into the west or now part of the pond. From the new part by an open cutting water runs to Garshiddaya's cistorn and from Garshiddappn's cistern a covered passage brings it to the Bhuspeth cistern in a central part of the town from which the people draw water. Towards the west of Old Hubli, in the lands of Krishnapar and covering an area of forty-four acres, is an old pond known as Heggeri or the large pond. From this pond water goes by a lately built underground passage to a reservoir opposite the Bhayanishankar temple in the old fort. About half a mile east of the new town is the Karkihalladkeri pond which was built in 1856-57 by Mr. Gordon, then first assistant collector, by damning the Karkihalla stream. The embankment is of mud with stone sluices. In 1883 the pond was repaired out of local funds. Its water is used for drinking washing clothes and watering cattle. Round the town are two or three other small ponds which dry in the hot weather and during the rainy season are used for washing and for watering cattle.

Wells.

New Hubli has about 386 sweet water and about 250 brackish water stepless wells and Old Hubli has 100 sweet water and about 150 brackish water stepless wells. The people of the new and the old towns wash clothes along the stream which runs between the two towns. During the rainy months one of the smaller pends near the town, the sweet water wells within the limits of the Holeru and Madigeru quarters, and the stream between the old and the new towns, supply ample drinking water to low caste Hindus. During the hot weather these sources of water fail and low caste people are forced to go to the Gurshiddapa and Bhuspeth reservoirs for their daily supply of sweet water. They are not allowed to touch the water and the want of a separate reservoir for the lower classes is much felt. To the west of the old town are groves of mangoes tamarinds and guavas and a few gardens where vegetables, plantains, and sometimes sugarcane are grown. In the middle of one of the gardens is a large and deep out-stone well about ten yards square. On the west side of the well stone steps lead to the water's edge. At the head of the steps facing east is a small three sided room built of fine out-stone. On the top of the inner side of the west wall of the room is a small inscription in Sanskrit, dated 1728 recording obeisance to the spiritual guide Shri Satyapurna Tirth. It is said that a rich Brahman morehant of Old Hubli built the well and dedicated it to Satyapurna Tirth the twenty-second Madhavacharya guide (1706-1726).

On an open airy and central site in a large enclosure close to the west of the Dhárwár-Harihar road, and to the south of the public road from the new to the old town, is the Hubli charitable dispensary. Within the dispensary enclosure is the assistant surgeon's house, out-houses, and a brackish well. In front of the dispensary is a small flower garden. In 1883 the dispensary treated 142 in-patients and 15,896 out-patients. Government pay £200 (Rs. 2000) a year and the municipality meets the rest of the cost up to £300 (Rs. 3000).

Hubli has twenty-six schools, thirteen of them Government and thirteen private vernacular schools. Of the thirteen Government schools, which have an average attendance of 181 and are maintained at a monthly cost of £82 (Rs. 820), one is anglovernacular (118), six are Kanarese (318, 147, 89, 82, 73, 67), one Maráthi (79), one Hindustáni (243), three girls' schools (102, 84, 41), and one Kanarese school for low castes (63).1 Of the private schools Kanarese is taught in seven Marathi in four and Sanskrit and Hindustani in one each. Of 2399 the total number on the rolls, 1907 or 79.5 per cent were boys and 492 or 20.5 per cent girls. Of the total number 1896 or 79:03 per cent were Hindus and 503 or 20 97 per cent were Musalmáns. Among Hindus 750 (515 boys 214 girls) were Lingáyats, 268 (229 boys 39 girls) Bráhmans, 139 (54 boys 55 girls) Patvegárs, 72 (49 boys 23 girls) Maráthás, 57 (30 boys 27 girls) goldsmiths, 53 (31 boys 22 girls) weavers, and 52 (36 boys 16 girls) were Jains. Devangs, tailors, dyers, shepherds, carpenters, painters, traders, coppersmiths, Rajputs, washermen, and lime-burners varied from 44 to 3. Other Hindus numbered 208 and low castes seventy.

The Native General Library and Reading Room with twenty-five subscribers paying subscriptions amounting in 1883 to £8 6s. (Rs. 83) has 278 English, Maráthi, Kánarcse, Gujaráti, and Sanskrit books, and takes one daily and two weekly English, and six Maráthi and one Kánarcse weekly newspapers. The library was established about 1867, chiefly by the exertions of Messrs. Reid and Cameron the Collector and First Assistant Collector of Dhárwár. The municipality makes the library a yearly grant of £9 6s. (Rs. 93).

Hubli has thirty-seventemples, twenty-seven monasteries, seventeen morques, a Protestant Christian church of the German Mission, and a Roman Catholic chapel. Of the temples thirteen are in the old town and twenty-four in the new, of the monasteries twelve are in the old town and fifteen in the new, and of the mosques eight are in the old town and nine in the new. The Christian church and chapel are in the new town. The temples in Old Hubli fort are two to

Chapter XIV.
Places.
HUBLI.

Dispensary.

Schools.

Native General Library.

> Places of Worship.

I The figures in brackets show the average daily attendance.

Chapter XIV.

Places. H_{DBLI_*} $T_{emples.}$

Bharanishankar's T_{emple} .

the grandevtas or village goddesses, Dyamaya and Dargaya the cholera and small-pox goddesses, one each to Anantshayan, Bhaya. and Hanuman, a small memorial shrina to l Bombay Gazetteer, Cholors and Small-Pox Suddesses, one caud to Augustayan, Dasia.

Also the contact of the contact nishankar, Dattátraya, and Hanuman, a small memorial sarine to died in 1789 and a Jain temple of Anantnáth. died in 1782 and a Jain temple of Anantnáth, Bhayanishankar's is an old temple of the eleventh century with a

Enavanishankars is an out tempte of the elevents century with a similar to that of which that af which that af which that are the that of which that are the transfer of the tempte. images are roughly cut out of stone similar to that of which the temple and of the images. Is onit. The workmanship of the temple and of the images is larged to the temple consists of a middle hall facing east, an internal and two smaller and cide almines. The workmanship of the temple and of the images is Similar. The temple consists of a minute name lacing east, an inner and larger shrine to its west facing east, and two smaller and side shrings and the middle hall facing worth. Interest suring to the west tacing cast, and two smaller and side sames opposite each other one to the north of the middle hall facing south of the middle hal opposite each other one to the north or the middle hall facing south appears to have been originally placed in the west larger shring in the smaller northern shrine and some other. appears to nave been originally placed in the west targer sunto.

Of the original of the smaller northern shrine, and some other than the original of the original or the image or transpan in the smaller northern sarine, and some other Ganpati remains in its old place. The ling with its case has been and larger to the southern and larger to the southern and smaller removed from the western and larger to the southern and smaller shrine and, placed there in a contrary direction, its left or mater-Finning side facing east and the right side facing west. In the sum of the right side facing west. In the sum of the right side facing west. larger and western shrine from which the ling has been removed and highly make image of Nordyna short. larger and western surme from which the ting has been removed three feet high has been placed. All round the archivary over the whole is ent out head of the chief image are smaller images. The whole is cut out of hard black stone different from the stone of the temple and of the older images. Near the temple is a stone slab (7'X4'X4') closely curved from top to bottom with Old Kanarese writing. The last few lines seem to have been lost; the rest is easy to read. The inscription is dated Shak 9 . . (976?) Parthiv samualsar and records, on the occasion of a sun-eclipse, on the no-moon day of records, on the occasion of a sun-ecupse, on the no-moon day of Hallur by the Western Chalukya king Bhuvanaikamalla. Outside the two long side verandae have hear hall to the following the control of th the temple, and near it, two long side verandas have been built on three feet high stone plinth. Between the verandar is a massage a three feet high stone plints. Between the verandas is a passage of the v a three test fight stone pintu.

from the street into the temple.

The versadas and passage between the versation of the montant process. them are roofed with wooden work. The style of the roof and the carring on the faces of the beams support the local story that the additions warm made short 1760 Dente of the most and the the additions were made about 1760. Parts of the roof and the gateway are in ruins. A small stone pond the stone work of which has disappeared was built in front of the temple. The municipality are in runs. A sman stone point one stone work of which seems and a with a has widened the pond on all sides and surrounded it with earthen embankments. The water of the pond is used for drinking purposes.

Inscription.

I The substance of the inscription has been given by Pandit Govind Gangddar, Schoolmaster of United and Only 9 the first of the three figures at Govind Gangddar, School 96; and the suggested to which the cyclic year Parather can be clear in the data of Talla II. (A.D. 973-993) the founder of 1075 father data or Someshra II. (1068-1075) traited corresponds and in which year Parather cross the sample of Talla II. (A.D. 973-993) the founder of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the Western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not called a contract of the western Chalukyas who is not ca

Old Hubli town has four Brahmanical temples to Banshankari Hanuman Ishvar and Parvatdev, and two Lingayat temples to Jangli Basvanna and Virbhadra. The Hatkars or Devangs have three religious houses or maths one in Old Hubli, one in Kaulpoth. and one in Vithalpeth. To the west and outside of the old town, in the lands of Krishnapur village, is a solitary tomb of Chitánand Svámi. One Siddappa, who is about forty years old, calling himself a saint or sadhu, lives in the tomb. He is said to have been a Lingayat but has left his caste. He eats at the hands of persons of all classes but none of the higher caste people cat of his hands. He rubs ashes on his body and brow and worships no images. Hundreds of people go to him daily and give him money and food. A yearly fair is held in honour of Chitanand Svami. Of the eight Musalmán mosques in Old Hubli two are in the fort, one the Safa mosque in the town, and five the Sadar Safa, Mastán Safa, Birband masjid, Islámpur masjid, and Jáma masjid in Náráyanpoth.

New Hubli fort and town has twenty-four temples three of them of Dattátraya, Ishvar, and Hanumán in the fort. Of the twenty-one temples in the new town fifteen are Brahmanical, five Lingayat, and one Jain. The Brahmanical temples are of Vyankatraman, where a yearly fair lasting for ten days is held in Ashvin or Soptember-October and the god's car is drawn on the last day; of Vithoba, Rám, and Krishna; a tailor's Vithoba and four temples of Hanumán in Adikivoni, Virápur, Timságar, and Yellápur; Kalmeshvar in Adikivoni, three of Durgava in Dájibápeth Bomápur and Yellapur,2 Tuljabhavani in Dajibapeth, and Kalamma in Bogar street. The Jain temple is in Bogár street. The five Lingayat temples are of Virbhadia in Pagdivoni, of Parvatdev in Bhusvoni, and three of Basyanna, one called Myanada Basappa in Hurkadlivoni, the other in Kaulpeth in whose honour a fair is occasionally held, and the third called Budengudda Basappa in Ghantikeri, in whose honour a yearly fair is held on the full-moon of Chaitra or March-April. A memorial shrine of Raghavendra Svami, the chief priest of an under-sect of the Madhva Brahmans who died in 1671, completes the list of Hindu temples and memorial buildings in the new town.

Of the fifteen Lingáyat monasteries Mursavirad is the largest and most substantial with a large enclosure and a small garden. The local story about the origin of the monastery is that Basav's adherents, amounting totwenty-onethousand men, were divided into three bodies. The first body included three thousand ascetics or viraktas, the second six thousand ayyas or jangams that is ordinary priests, and the third twelve thousand laymen. Each body had a head officer of its own class. The head officer of the first or virakta body was a very holy ascetic who was styled Mursavirad Appanavaru or Father of the

Chapter XIV. Places. HUBLI. Temples. .

Monasteries.

2 A yearly fair is held in honour of Yellapur Durgava in Ashvin or October-

November.

A yearly fair lasting for ten days is held in honour of the Yellapur Hanuman in Assein or September October.

Chapter XIV. Places. Huria. Murrarirad

Monastery.

Three Thousand. Several disciples of the original head of theils. thousand ascetics continued his religious title. One of these Mar savirad ascotics lived with the chief Lingayat priest Murgi Srip at Chitaldurg in Maisur. The two quarrelled and Mursavin Systemi left Chitaldurg and came to Now Hubli about 1727 sec after the fort was built by Basappashetti. Basappa entertained the Svámi with great respect, built a monastery for him close k his house near the site of the Bhuspeth reservoir, and called it the Hiromath or High Monastery. Gurusiddha Svami, hold spiritual control over all Lingayat chi-The Syami whose name was priests in the Bombay Karnatak. His successor was called Gangádhar Svámi and these two are the only names which succeeding heads of this monastery have borne.2

About 1820 Gurshidappa Svami the chief Mursavirad priest at Hubli built by public subscription the present large Muraviral monnetery, and over since he and his successors have lived there. Every Monday and Thursday Lingayats of both sexes go and pay their devotions to Marsavirad Svami. On every Monday in Shracar or July-August and Karlik or October-November many Lingayata go to the monastery, pay their devotions to the tombs of all former chief priests as well as to the present chief priest, and present him with fruit and money. They rub their brows and eyes with the ashes of cowdung burnt before the tembs, receive from Gurusiddha Srámi his blessing and a coconnut, a plantain, or adate, and return home. On the third and fourth Mondays in Shriftan or July-August a great yearly service or puja is hold. The monastery building is cleaned and whitewashed and decked with plantain trees and mango branches. The ground is spread with carpets and a large sofa with handsome cushions covered with lace is placed to the right of the middle of the building. In the middle of the building is set a large chair of state on which one of the chief priest's assistants sits richly dressed and ornamented. He is believed for the time to represent the god Shiv. His feet are washed and baskets of flowers are thrown over him. From

I Kanarese mur three, sarirad thousand, and appanararu father.

**Up to about 1810, whenever the chief priest of any of the smaller Hubbi was then carried in stato to the site placed and worshipped in the Hiremath and been worshipped in his own monastery and where the large Muravirad monastery now it. The origin of this change in practice was, that, about 170, a question areas at the carried in Bijapur as to whether Lingdyat priests should dine in the houses of Lingdyat harbers. Opinions were divided and the matter was referred to the Muravirad Syami at Now Hubbi. He held that Lingdyat priests should not in the houses of with Lingdyat tharbers, as the harbers were not the descendants of genuine Lingdyat converted to Lingdyatism. The chief priests of all the monasteries at first abided by and dined with Lingdyat ruling. But some Lingdyat laymen of the opposite party privated and dined with Lingdyat too. The Muravirad Syami at the Rudratchi monastery to join them, and the priest west toes a defect which debarred him from heing worshipped. The Rudratchi priest conflained to the chief of Sangli under whom New Hubbi thow was. The Sangli under whom New Hubbi thow was. The Sangli Muravirad Syami was appointed.

Sentence could be carried into effect Mursavirad Syami committed suicide and a new

hree to ten at night the chief monk sits on the sofa, surrounded by a large number of the subordinate Lingayat clergy. blayed, drums are beaten, and a couple or two of dancing girls sing and dance in front of the chief priest. At this time the whole of the ownspeople, Linguyats, Brahmans, Marathas, Patvegars, and others, rich and poor, old and young, men women and children, attend, offer a small present of fruit and flowers, or a little money to the chief priest, and pay their respects to him. Except Brahmans all prostrate before the Svámi. When a very respectable or rich Lingarat comes, the chief priest puts forward his feet, and the worshipper leans his head on them, retires, and sits in the assembly. The chief priest then gives to the more favoured as his favour or prasad, some fruit or sweetment. The meeting ends with fireworks about ten. From time immemorial the Smart Shankar Bharati Svami of Kudalgi in Maisur has enjoyed the privilege of riding in a pálkhi or open litter carried crossways through the public streets. In imitation of this practice about fifty years ago Gurusiddha Svámi Mursavirad attempted to ride in a palanquin carried crosswise. The Smart teacher filed a civil suit to stop this innovation. The court decreed that there was no objection to any one riding in a palanquin carried crossways in the public streets. The decree was appealed against but upheld by the Inte Sadar Adálat and subsequently by the Privy Council. Close to the monastery is a great wooden car intended to draw the ling and the chief priest through the public streets on the great festival, but the car is so heavy and the cost and the risk of accidents so great that it is seldom used. South-east of Old Hubli in the lands of Krishnapur, a new temple with a large square enclosure has lately been built by a madigia or leatherworker named Yellia. He says that he went towards the coast and paid his devotions to the god Manjunath, and was possessed by him, and that he has built this temple in honour of that god and called it Dharmasthal or the Holy Place. He has planted several conical stones round a central pyramid of earth. On these stones he strews flowers and perfumes and burns incense before them every day. He has also set apart a stone in honour of the goddess Yellamma at Saundatti. Hundreds of low caste people go to him every day and give him fruit and money considering him a holy man and a prophot.

New Hubli has nine mosques, eight of them called after the streets in which they are built Ganeshpeth, Kumbarvoni, Mahaldarvoni, Mullavoni, Pendharivoni, Pinjarvoni, Virapur, and Yellapur, and the ninth Phaniband in Kaulpeth.

Christians are buried in a part of the German Mission enclosure. Lingayats are buried in consecrated spaces of ground outside the town and belonging to the following eleven monasteries Dogal, Harasdevar, Hire, Hos, Kal, Kalburgi, Kavdi, Rudradovar, two Rudratchis, and Shiggaon. Musalmans are buried to the west of the German Mission enclosure on the lands of the village of Marian-Tim-agar. The bodies of Brahmans, Marathas, Patvegars and others, are burnt behind the Karkihallad pond and in some places along the Karkihalla brook which runs to the south of New Hubli and joins the Gabbur brook towards the south of Old Hubli.

Places.
Huna.
Mursavirad
Monastery.

Morques,

Cemeteries.

Chapter XIV. Places. HUBLI. History.

one Kalvánshetti was the head of the Lingayat community of Old Hubli. He was a very rich man and his sister's son Basappa lived long under his patronage. The uncle and nephew quarrelled and the nephew Basappa left the town with a few followers, and settled in the neighbouring village of Bomapur. In 1727 Majid Khan Nawab of Savanur allowed Basappa to build a city on the site of Bomápur and the surrounding villages of Mádináikan, Arlikatti, part of Marian-Timságar, Bidanhal, Yellápur, and Virápur. The Nawáb laid out one main street at his own expense and after himself called it Majidpur. Basappa built the fort of New Hubli at a cost of £250 (Rs. 2500). The fort and town of New Hubli seem to have been included in the military grant of lands yielding a yearly rental of £250,000 (Rs. 25,00,000) which the Patvardhans received from the Peshwa about 1764. When a partition was afterwards made in the Patvardhan family New Hubli appears to have fallen to the Sánglikar's share by whom the fort of Old Hubli was held when it fell to General Munro on the 13th of July 1818. Captain Moor described Hubli as the most extensive populous and respectable town in that part of the country. The country round was wooded watered and highly tilled. The appearance of the place showed industry and happiness. There was a large traffic both inland and with Goa. To Goa they sent sandalwood and ivory and from Goa they brought silk, cotton, wool, and rice. From the silk large quantities chiefly of women's robes were woven, and the stock of goods for variety and taste exceeded that of any town in the country. The Saturday market had a great show of horned cattle, beteluut and grain, and cloth merchants flocked from a distance and so crowded were the streets that it was difficult to pass through The bankers were numerous and rich. They had dealings with Surat in the north, Haidarabad in the east, and Seringapatam in the south. Though the town was so prosperous, it had no fine buildings. Neither of the forts was of any strength. The people escaped being plundered in 1790 by paying Parshuram a large sum of money. There was said to be an English merchant's tomb at Hubli, but Moor thought it was Muhammadan. There was a Musalman prayer place or idga and a graveyard but very few About this time Shivaji the Kolhapur chief, taking advantage of local disturbances, for a time carried the limits of his kingdom as far south as the Tungbhadra. In 1796 he plundered Hubli and made over the old town to one of his adherents the Desái of Kittur.⁵ But the Peshwa's officers won back the town. In 1800 General Wellesley mentions Hubli as the only place in Dharwar where Dhundia Vagh had still a garrison. In 1804 Old Hubli was held by the Phadke family of Konkanasth Brahmans.

As Basappa was of Kalyánshetti's family in some official papers he was called Kalyán Shetitavar or belonging to Kalyánshetti. This has led to quarrels between the descendants of Kalyánshetti and Basappa which are still (1884) unsettled.

Moor's Narrative, 253-254.

Stokes' Belgaum, 61.

Old Marátha MSS. with the Pátil of Old Hubli.

Moor's Narrative, 253-254.

Moor's Narrative, 253-254.

Stokes' Belgaum, 61.

Supplementary Despatches, India (1797-1805), II. 88.

When (1802) General Wellesley was marching south after his defeat of Sindia, Old Hubli was besieged by one of the Peshwa's provincial managers or sarsubhedárs. On hearing of General Wellesley's arrival, the fort garrison asked him to help them. They sent him a letter addressed to the sarsubhedar by the Peshwa directing him to give Old Hubli and its dependencies to Bápu Phadke, the brother-in-law of the Peshwa the person for whom the garrison field it. On the other hand the sarsubhedar produced the Peshway order commanding him to besiege the place and take it by force from Phadke. The sarsubhedar had been employed against the hand fort for nearly six weeks. General Wellesley advised the siege is stopped till they found out what the Perliwa really wished." In the last Maratha war (1815-1818) after taking Dambal, General himnir came to Obritubli of the 13th of January 1818. The commandant of Old Hubli fort was summoned and promised to surrender, and, on the following morning, marched out with 300 men the rest having deserted from want of pay.2 At the close of the fair season (151/ June 1818) General Munro's and General Pritzler's divisions of the grand army of the Decean reached Old Hubli. A battalion with the heavy guns and ordnance stores went to Dharwar; but the head-quarters and the remaining corps cautoned at Old Hubh for the rains.3 During the latter half of 1818 (July-December), cholera raged at Hubli. In General Pritzler's camp, in three days two officers and apwards of 100 Europeans were carried off by cholera 1 Most of the British tombs still seen near Old Hubli seem to have been raised to officers and men of the twenty-second Light Dragoons, and the 31th, 53rd, 69th, and 81th Regiments of foot. In 1820 New Hubli with forty-seven villages and a net yearly revenue of £6205 (Rs. 62,050) with several districts was ceded by Chintananta's Appa Saheb of Sangli instead of his contingent.6 In 1844 Captain Wingate found Hubli an important trade centre with a population of \$3,000 living in 5458 houses. The town had a number of long established banking and trading firms who issued bills for large amounts on Bombay, Madras, and other trade centres Its export trade consisted chiefly of local cotton cloth, raw cotton mostly sent to Bombay by Kumta, and tobacco betelunts and chillies. There was also a considerable trade in grain, oil, butter, and other local produce. The imports were large quantities of salt, metals, British cloth and hardware, and cocoanuts from the coast.

Hulgur, a large village on the Hubli-Savanur road about eight miles north-cast of Shiggaon, with in 1881 a population of 2973, is a noted place of Musalman pilgrimage to a temb of the saint Hazratsháh Káderi. Hazratsháh is said to havo lived in Sávanur about 1800 under the Nawab Abdul Khairkhan. Once while the raint was at Bankapur the Nawab violated the daughter of one of the

Chapter XIV. Places. Honer. History.

Hotaun.

¹ Hamilton's Description of Hindustan, II, 238-239.
2 Blacker's Marátha War, 287.
3 Blacker's Marátha War, 287.
4 Rombay (Varrier of 19th December 1818.
5 See above pp. 433, 6
6 Aitchron's Tratics, Engagements, and Sunads, V. 418.
7 Survey Superintendent's 415 of 25th October 1814. * Sec abovo pp. 433, 622.

Chapter XIV.
Places.
Hulour.

saint's disciples. The saint cursed the Nawab and retired to Hulgar about eight miles north-west of Savanur. He died at Hulgur and the four tombs of himself and his relations are in a valley about half a mile west of the village. A fair attended by about 5000 people from all parts of Dhárwar and the neighbouring villages of Belgaum is held after the full-moon of Magh or February-March. Most of the pilgrims come from the full-moon fair at Mailar in Belári twenty-seven miles south-west of Hulgur. Nawab Abdul Dalilkhan (1834-1862) the grandfather of the present Nawab was a firm follower of the saint and took a great interest in the fair. He used to attend every year and remain at the fair for a week when his gifts and dinners attracted large numbers of wrestlers, dancers, beggars, and visitors. Since his death in 1862 the number of people at the fair has greatly fallen off. The tombs enjoy a yearly grant of £50 (Rs. 500) in land and £15 (Rs. 150) in rent. Hulgar village has a temple of Siddhaling with eight stone inscriptions varying from 4' to 2' in length and from 4' to 1' 8" in breadth. All are clear and legible but have not been read. There is a well called the Kapilbávi with an inscription dated 1122.

HULINALLI.

Hulihalli, a small village on the Bankapur-Ranebennur road, about three miles north-west of Ranebennur, with in 1881 a population of 943, has a fort and two temples. A temple of Rameshvar in the fort has on the south an inscription dated 1143. The other temple of Rameshvar outside the village has to its right an inscription dated 1182.

HURLIKOP.

Hurlikop, a small village six miles cast of Bankapur, with in 1881 a population of 1090, has a temple of Ishvar with an inscription $(5 \times 1' 4'')$. There are three other inscriptions in the village.

Huvirsioly.

Huvinsigly village, fourteen miles north-cast of Bankapur, with in 1881 a population of 1004, has a temple of Hanuman with two inscriptions.

HUYICOL.

Huyigol village, six miles north of Gadag, with in 1881 a population of 1875, has seven inscriptions, one in a temple of Ramling, another in a temple of Kulmeshvar, a third near the village police station, and the remaining four in a temple of Maruti.

INGALGENDI.

Ingalgundi, a small village about eight miles south of Kod, with in 1881 a population of 549, has a temple of Kalleshvar with an inscription on the bank of a pond dated 1049 (S. 971) in the reign of the Western Chálukya king Someshvar I. (1042-1069) and a Sati stone or mastikal the date on which could not be made out, except that it was in the cycle year Bahudhánya.

KACHIVI

Kachivi, a small village about fifteen miles north-west of Kod, with in 1881 a population of 836, has temples of Raineshvar and Ganappa. In front of the Raineshvar temple is a hero stone or virgal dated 1254; and on the south front of Ganappa's temple is an inscription also dated 1254.

Kadarmandalgi,

Kadarmandalgi, a small village on the Bankapur-Ranebennur high road about nine miles west of Ranebennur, with in 1881 a epulation of 1758, has a temple of Marnti Kantesh whose image is locally believed to have been consecrated by the Puranik king Janmejaya. On the flat pillar of the temple is an inscription dated S. 1498 (1576). In a neighbouring field is another weatherworn inscription.

Chapter XIV. Places.

Kadur, a small village about three miles east of Rattihalli in Kod, with in 1881 a population of 1412, has a temple and an inscription.

RADUR

Ka'gneli, a large village about thirteen miles north-west of Kod. with in 1881 a population of 1232, is an old petty divisional centre. Kagneli has temples of Adikeshay, Kalahasteshyar, Lakshmi Narsinh, Sangameshvar, Someshvar, and Virbhadra. Adikeshav's and Lakshmi Narsinh's temples are two plain stone buildings in the same enclosure. Adikeshav's temple is sixty-six feet long by twenty-three feet wide and has twelve pillars in the outer open porch. Narsinh's temple has a wooden pillared front porch. The temples are said to have been built by two persons Kondappa and Venkappa. image of Adikeshav is said to have been brought from Bad in Bankipur by Kanakdás a sixteenth century Kánarese poet (1564).1 The temple priests who are partly Linguyats partly Brahmans enjoy a yearly allowance of £19 8s. (Rs. 491) to meet the cost of holding the car festival. In the court of the temples is a shrine of Bhandarigiri Svami with four finely carved old pillars built into it. of the pillars have five short inscriptions. Other excellently carved Kalahasteshvar's temple has a slab carved fragments lie about. with figures of Shiv and Parvati and smaller figures of Ganpati and The pillars of the temples are carved Kártiksvámi in entiro relief. with figures and festoons, the outer wall of the porch is of stone and mud, but the spire is old. There are four inscriptions in or near this temple one to the cast of the temple dated 1120 on a stone sunk in the carth 3' 9" broad and 6' 10" above ground. The second dated The other two on and near the 1282 is on a hero-stone or virgal. flag pillar have not been read. Sangameshvar's temple has a rather unreadable inscription sunk in a mud platform. Someshvar's temple has three inscriptions, the dates of none of which have been made out. To the north of Virbhadra's temple are three inscribed stones sunk deep in the earth. Kakur, a small village on the Tungbhadra, about thirty miles

Kioneli.

Kakur, a small village on the Tungbhadra, about threy haves south-cast of Gadag, with in 1881 a population of 72, has in the court of a temple of Maruti a well preserved inscription of thirty-two and a half lines.

KARUR.

Kalas, a large village fifteen miles north-east of Shiggaon in Bankápur, with in 1881 a population of 2125, was a petty divisional Bankápur, with in 1881 a population of 2125, was a petty divisional centre. It has good cotton soil and a weekly market is held on Saturday when the field produce of the surrounding villages is sold. The village has a temple of Náráyandov and five inscriptions. The inscriptions which vary in length from 7 to 2 and in breadth from 3 1" to 2' 1" are all legible. One is dated 930 and belongs to the ninth Rúshtrakuta king Govind V.2

Kalas.

Compare Rice's Myrore and Goorg, I. 101. Find. Ant. XII. 249.

Chapter XIV.

Places. Kalguatgi. Kalghatgi, in north latitude 15°10', east longitude 15°3', the headquarters of the Kalghatgi sub-division, with in 1881 a population of 3271, lies on the Karwar-Dharwar road twenty miles south of Dharwar. Kalghatgi has a rest-house and a weekly market on Tuesdays when rice is chiefly sold. Under the Marathas Kalghatgi was the head-quarters of a division or samat.

KALYÁN.

Kalya'n, a small village four miles south of Shiggaon, with in 1881 a population of 381, has a tomb of a Musalman saint Pir Padshah and on a stone on the south of the tomb an inscription dated 1025 in the reign of the Western Chalukya king Someshvar III. (1018-1042).

KAMDHENU.

Ka'mdhenu, six miles north-east of Kalghatgi, with in 1881 a population of 577, has an old temple of Kalmeshvar built of black granite with ornamental mythological carvings on the outside of its walls. Near the temple are two inscriptions said to be much worn. About a mile to the south of the village is a water-course called Kalhalla. About 1850 a masonry weir to raise its water for irrigation purposes was built by Government at a cost of £1000 (Rs. 10,000).

KANCHINEGLUR.

Kanchineglur, seven miles north-east of Hangal, with in 1881 a population of 700, has on a mound of earth an inscription dated 1105.

KANVISIDGERI.

Kanvisidgeri, a small village about ten miles south-east of Kod, with in 1881 a population of 279, has a temple of Kanvisiddheshvar. The temple has four inscriptions three in the temple and one on a stone in a row of slabs to the south of the temple. Of the three inscriptions within the temple two are on pillars dated 1265 and 1269, and the third is dated 1152; the fourth inscription outside the temple is dated 1108.

KANNESHVAR.

Kanneshvar, a small village ten miles south-east of Hángal, with in 1881 a population of 208, has a temple of Kannapa with two inscriptions dated 1005 and 1145. The 1005 inscription belongs to the reign of the Western Chálukya king Satyáshraya II. and gives the name of his feudatory Bhimráj also called Tailapana-Ankakára as governing the Kisukád Banavási and Sántalige districts.

KANVALLI.

Kanvalli, village about ten miles south-east of Karajgi, with in 1861 a population of 1338, has old temples of Parmeshvar and Bhogesh. The Parmeshvar temple, a stone and brick building is about fifty feet long and seventeen broad. It has four pillars and a spire much out of repair. The village has three inscriptions of sixteen twenty-four and seventy-two lines.

KAHADOL

Karadgi, eight miles north-east of Bankapur, is a large village once the head-quarters of the Karadgi petty division. The deshpandes of Karadgi still hold vatan lands. In a revenue statement of about 1790 Karadgi appears under the Bankapur Sarkar as the head-quarters of a pargana yielding a revenue of £12,000 (Rs.1,20,000).

KARLIGI.

Karajgi, north latitude 14° 52′, and east longitude 75° 31′, the headquarters of the Karajgi sub-division with in 1881 a population of 3838, lies about fifty miles south-east of Dhárwár. It has a weekly

Fleet's Kanarcse Dynastics, 42.
 War. J. R. Middleton, C. S.
 Waring's Maráthás, 246.

market on Tuesday when field produce chiefly Indian millet and pulse are sold.

Chapter XIV. Places.

Kirgori, a small village on the left bank of the Tungbhadra about fifteen miles south-east of Kod, with in 1881 a population of 362, has a temple of Hanuman built, it is said, about 300 years ago by one Konappa Sunkod a collector of customs. The roof of the temple is supported on sixteen pillars.

Kirgeri,

Kod, a large village in the Kod sub-division, with in 1881 a population of 1252, lies on the Samasgi-Harihar road about six miles north-east of Hirekernr the sub-divisional head-quarters. Kod has a trade in rice and chillies valued at about £200 (Rs. 2000) a month. The village has a temple of Hanuman with an Old Kanarese inscription.

Kon.

Kodmagi, cleven miles south of Kod, with in 1881 a population of 468, has temples of Boyala Basappa and Siddharámeshvar. The Basappa temple has an inscription dated 1158; and the Siddharámeshvar temple two inscriptions one dated 1080, and another of which the date cannot be read.

Rodmagi.

Kolur, a small village three miles west of Karajgi, with in 1881 a population of 747, has a temple of Basavanna in the Jakhanáchárya style with twelve pillars and two inscriptions.

Kolur.

Konnur, a large village on the Malprabha, about twenty-five miles north of Navalgund, with in 1881 a population of 2026, has black stone temples of Parmeshvardev and Rameshvar the latter a yery large building.

KONNUR.

Koranhalli, n village on the left bank of the Tungbhadm in Gadag about six miles south of Mundargi, has a large old weir of dry rubble stone built right across the Tungbhadra. The weir has been boldly built on a natural barrier of rock in the river formed by a trap dyke in the granite. Its crest is from twenty to twenty-two feet above the low water level of the river, and it is about twenty feet wide at the top. The large stones, many of them twelve feet long, three feet deep, and 2 feet 6 inches wide and some even sixteen feet long, which mostly form the crest of the weir, have been quarried out by wedges. The central part 200 to 300 feet wide has been breached and the weir is now useless. A contour running from it on the Bombay side was not favourable for commanding land for irrigation and the work has not been restored. The weir is supposed to have been built by the On the Madras side of the weir is the village of Vijaynagar kings. Modalkatta which means 'The first weir.' This weir is probably the first of a series of huge weirs built by the Vijaynagar kings. Some of them lower down in the Madras Presidency are still in use.

Koraniialli.

Kotumachgi, a large village on the Gadag-Ron road fifteen miles north-cast of Gadag, with in 1881 a population of 1937, has a temple of Somappa with two inscriptions dated 1112 and 1142, the first to the left of the image of Somappa. There is a ruined fort in the village.

Котимасийі.

Kudla, a small village at the meeting of the Dharma and Varda rivers, twelve miles north-east of Hangal, with in 1881 a population

KUDLA.

Chapter XIV.

of 611, has a temple of Sangameshvar with an inscription and a large yearly fair.

Kurdápur.

Kurda'pur, a small village seven miles cast of Dharwar, has a black stone Lingayat temple dedicated to Virbhadra, Someshvar, and Siddhaling. The temple has a central hall with three side shrines. The roof is supported on twelve pillars.

Kuntanhashalli.

Kuntanhashalli, a small village two miles north-east of Hángal, with in 1881 a population of 231, has a temple of Basappa with an inscription dated 1147.

KURTKOTL

Kurtkoti, a town about eight miles south-west of Gadag, with in 1872 a population of 5901 and in 1881 of 4516, has temples of Gavareshvar, Keri Basappa, Shankarling, and Virupáksha and five inscriptions one near Gavareshvar's dated 1244, another at Keri Basappa's dated 1082, two at Shankarling's dated 1132 and 1138, and one at Virupáksha's dated 1087. About 1835 a copper-plate grant was found in digging a foundation at Kurtkoti. The grant professes to be dated in A.D. 610 in the sixteenth year of the Western Chalukya king Vikramáditya I., who appears on better evidence to have reigned from 670 to 680. Mr. Fleet has proved that the grant is a forgery of the ninth or tenth century A.D.

KUSUGAL.

Kusugal, with in 1881 a population of 2071, is a large village about six miles north-east of Hubli. During 1870-75 large experiments for introducing New Orleans cotton were made; but as the result proved unsatisfactory they were given up in 1876. Kusugal has the ruins of a large fort, part of which is kept in repair as a district bungalow. In 1790 Kusugal was described as a small fort about a mile and a half round, very handsome and well built, strongly placed on rising ground in a black plain. The fort seemed to have been built by a man of science and the builder or improver was said to have been Badr-ul Zamán Khán, Tipu's general, who held Dharwar for seven mouths against a united Maratha and English force in 1790 and 1791. The outer defence was a ditch twenty feet wide and deep which was carried all round. Behind the outer ditch was a breastwork with a parapet and embrasures and a not very thick hedge. Between the hedge and the covert way was a second breastwork irregular and unfinished. The curtain was of stone flanked by bastions and commanded by cavaliers. The entrance was from the south through four or five strong gateways.3 In 1826 a committee of inspection described Kusugal as a strong stone fort, irregularly oblong, about 300 yards long and 200, yards broad. It was surrounded by a broad dry ditch and had

Fort.

¹ Indian Antiquary, VII, 217; Kánarcsa Dynastics, 27. ² See above pp. 298-300. ² Moor's Narrative of Captain Little's Detachment, 257. ⁴

² Moor's Narrative of Captain Little's Detachment, 257.

⁴ The committee called it a place of considerable strength for three reasons, (I) the rampart was covered by an earthen mound or glace to a height unusual in Marátha works; (2) the absence of water for five miles round which made a regular attack very difficult; (3) the little cover afforded by the neighbourhood to a hestile force. The committee recommended it as a good military depot, as its interior was of a dry hard soil and as a garrison even of 200 men could hold the place against a large force. There was one objection against this in the bad state of the reads in the neighbourhood during the rains, the soil being chiefly cotton-growing.

three or four guns and a few good buildings and materials specially stone quarries. A second committee of inspection in 1842 described Kusugal as a strong irregular fort about 200 yards long by 150 broad, with an inner and an outer line of fortifications. The inner works consisted of about eleven bastions joined by curtains all built of strong stone masonry and varying in height from twentyfour to thirty feet. The bastions were large and fit for ordnance especially a central bastion on the eastern face. This central bastion was sixty feet high and provided with parapets having embrasures or gunholes in good order. The entrance to this work was by a small door $(10' \times \overline{5}' \times 6'')$ strongly fitted in stone work near the north-east bastion on the east face. At a distance of thirty to forty yards this inner line of work was completely surrounded by an outer line of a twenty feet high rampart with parapet. The rampart had a small but steep glacis about fifty feet broad with at its foot a ditch about 15' broad and 10' deep. About thirty yards beyond the first ditch a second smaller ditch entirely surrounded the fort. The whole of the works were much ruined but from their height partly covered the inner fortifications. The entrance to the outer lines of works was by two gates in the north-east face; but the work about the gates was too much out of repair to render them of any use. There were two reservoirs in the fort, one of which never dried. Several quarries between the two lines of works from which the stone for the fortifications had been obtained also served as reservoirs and held water till March. There were a few inhabited houses and ruins of a palace within the fort, with no protection against shells. The committee found that the chief strength of the fort lay in the inner works. They were well built, were in good order, and were covered from ordnance by the outer line. The chief consideration for an invading force was, especially in the hot season, the absence of water in the neighbourhood.1 Kusugal fort was taken by the Maráthas immediately after the capitulation of the Dharwar garrison after a seven months' siege in 1791-92.2 The territories of Kusugal and Dharwar formed part of the land which the Peshwa ceded to the British under the Poons treaty of 1817.3

Lakkundi, about seven miles south-east of Gadag, with in 1881 a population of 3263, is a place of antiquarian interest with about fifty temples and thirty-five inscriptions. The temples are of various degrees of size and beauty and are said to have been built by the mythic architect Jakhanáchárya. Great artistic skill is shown in the stone carvings of many of the larger temples, the work somether tesembling Chinese ivory carving. The chief temples are of Chandramauleshvar, Ganesh, Gokarneshvar, Holgund, Basavanna Ishvar, Káshivishveshvar, Kumbhárgirishvar, Lakshmináráyan, Mallkárjun, Mánkeshvar, Nagardevár, Nanneshvar, Nilkantheshvar, Someshvar, Virbhadra, Virupáksh, and Vishvanáth. The Chandramauleshvar temple has three inscriptions all dated 1184. Káshivish-

Chapter XIV.
Places.
Kusugal.
Fort.

LARKUNDI.

¹ MSS.

² Moor's Narrative, 41.

³ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

³ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁴ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁵ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁶ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁷ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁸ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Sanads, V. 71; Prinsop's British India, 201.

⁹ Aitchison's Treatics, Tagagements, and Tagagement

Chapter XIV.

Places. $L_{AKKUNDI}$ Temples.

veshvar is the finest and one of the largest temples in Lakkundi, Vestivar is the inest and one or one interest complete in large or one of the contract of the porch, and facing it is an eastern temple with a shrine and a small Porch, and facing it is an easiern temple with a surme and a small antechamber. The porch of the western temple is joined a small considerable and antegnamper of the case temple by a lively lateral pathorn surronnaga by a low paraper. I no two upon ways of the fact are beautiful specimens of delicate chiselling. south and east are occurrent specimens of desirate consentary. The model of the sides and round the top are chiefly square; they are the sides and round the top are chiefly square; they monitings up the sides and round the top are continued square; they can be and in some of the mondings the patterns are so ent away belief that the or the monituings the patterns are so can away beamed that the from the door not and only fixed to it up the sides and ing forward. work and the door post and only fixed to it up the sides. Among these them are beautiful sounds of foliogens a soroll with a little mondings there are beautiful scrolls of foliago a scroll with a little figure in every twist, a line of little pairs of figures with convontional clouds between them, another of griffins rampant one above the other so arranged that their hodies form a seroll. Another the other so arranged that their bodies form a scroll. Another scroll is a lozengo-shaped flower repeated with little beads with fittle beads with foliage filling the angles, and one is made of little squares in each seriou is a local with a property of the squares in each seriou is a local with serious with the squares in each serious is a square of the square with serious with the square with serious in the square with serious with the square with serious with the square with serious with the square with serious squares and serious squares with serious squares and serious squares with serious squares and serious squares with serious squares and serious squares and serious squares with serious squares and serious squares are squares and serious squares and serious squares are squares and serious squares and serious squares are squares and serious squares and serious squares are squares and serious squares and serious squares are squares and serious squares are squares and squares are squares and serious squares are squares and serious squares are squares and squares are squares and squares are squares and squares are squares and squares are squares are squares and squares are squares and squares are squares are squares and squares are squares are squar of which snakes are most ingeniously twisted and knotted together. In the middle of these square monddings on either side of the door runs a slender projecting pilaster whose shaft is in sections square none mand he three and mentile hand with octagon, sixteen-sided, and round by turns and prettily hope with festoons of beads and ornamented in various other ways. On the Central projecting blocks over the doorways is Gala-Lakshni or the Central projecting blocks over the goodways is trajactorism of the dephants. The southern doorway has had a row of the tan under the detached and inserted small standing figures over the top under the cornice, and both doors have figures on either side at the bottom of the monthly and the millions in the interior form of which amonds Cornice, and both doors have agures on enther side at the mouldings. The pillars in the interior, four of which support the doors of the half. Are elaborately worked. The shrine doorway the dome of the hall, are elaborately worked. The shrine doorway the dome of the hall, are elaborately worked. The shrine doorway the dome of the hall, and workers making the control which any workers and workers making the control which any the documents of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the control of the hall the hall the control of the control of the hall the control of the c rivals the others in design and workmanship. On a raised plinth on the hall is a now of famala figures various about the surface that the surface the surface of the hall is a now of famala figures. one side of the hall is a row of female figures representing the manders mand the hall in her anorry mond the onlines. one side of the half is a row of remain neuron representing the goldess. Saptashati or Chandi in her angry mood. The ceilings only with a central research or letter and a little fillered work in the Corners. The exterior of the wall of the hall is divided into panels by thin pilasters and in each of these pilasters is a little canopied of the south faces of the wall of the wall of the south faces of the walls of niche. On each of the south, west, and north faces of the walls of the shrine is a prominent niche surmounted by a deep projecting Ahove this Cornice and a little tower above of the northern type. Spain and embracing the top of the hortuern bype. Abbut and denendent from a famo-face or kirdimarkly. The tower or shikklare again and embracing the top of the tower is a treiou canony with canony is remoted in each course of the entry. The tower or skitking on either side with canopy is repeated in each course of the spire. On either side when cancery is repeated in each course of the spire. On enther size in making a mythological scene when the spire is panels each depicting a mythological scene round this shring are ampted though saveral round the The niches round this shrine are empty, though several round the shrine have figures in them. On a stone called samadhikallu. eastern shrine have figures in them. On a stone called samadhikallu. in this temple is an inscription dated 1198. Kumbhargirishyar temple is now surrounded by buildings. It stree shrines with carved doors and four nillors with carved doors and four nillors with carved doors.

has three shrines with carved doors and four pillars with curiously. A stream only the spira is preserved. Mankashvar has three? scriptured bracket capitals. Or the interesting temple or interest Mankeshvar has three

1123 and 1241. Nagardevár temple has lost its spire and upper parts but what remains shows that, though not overloaded with ornaments, the temple has been finished with great care and elaboration. Inside of the shrine is a curious image of a cobra which appears to have been carved on the back of a Jina's throne. This temple has an inscription dated 1120. Nanneshvar temple has in the central hall four neatly carved pillars with square bases and in the porch sixteen pillars of four distinct patterns, one formed of eight slender round shafts clubbed together. The temple has three inscriptions one dated 1186, the other two have not been read. Nilkantheshvar temple, the outer wall of whose shrine is sculptured, is in ruins. Someshvar is a neat little deserted temple with three inscriptions one dated 1118. The other two are Jain slabs with much worn inscriptions. Virbhadra with two doors in front and sloping eaves has three inscriptions two on two large slabs built into the left wall and one on a stone outside, all undeciphered. Virupáksh, now the chief temple in the village, is plain and half ruined. Vishvanáth's is a double temple, the smaller one facing the larger. It is partially ruined and is exquisitely rich in carving. The north door, north side, and back of the shrine and a sort of attached polygonal pillar between the shrine and the porch on the outside are fairly entire. Dr. Burgess considers them perhaps the finest existing specimens of Hindu decorative work. The temple has an inscription dated 868. There are two Jain temples or bastis in the village. In the west of the town is the largest temple in Lakkundi, the principal Jain temple. It consists of a shrine a closed hall and an open hall or mandap. The last has been built in and closed up of late with mortar and mud walls. In the sanctuary seated on a throne is an image of a Jina. A rosette is cut on the tread of the step before the shrine doorway. The temple is still in use. The only figure sculpture is a representation of a seated Jina in little ornamental niches in the courses of the roof and spire. The walls are plain being divided into panels by pilasters with canopied niches occasionally introduced. The spire is of the Dravidian type, the first storey rising with perpendicular walls to a height of seven or eight feet above the roof. From this the roof runs up in a pyramidal form to the crowning member, the Dravidian final. A little distance from this large temple or basti is a much smaller deserted Jain temple. It was evidently dedicated to Parshvanath, but the image has been removed leaving only the back of the seat with the hooded snake on it. Brahmanic Hindus have appropriated the temple under the name of Nagardevar. It consists of a shrine a hall and a porch. Its exterior like the large Jain temple basti is very plain. The spire is completely gone. Several fragments of Jain figures lie about. One of the Jain temples has an inscription dated 1172. · The Lakkundi temples, afterwards rebuilt, suffered severely in a

The Lakkundi temples, afterwards rebuilt, sunered severely and temples. The Lakkundi temples, afterwards rebuilt, sunered severely severel

Places.

LAKEUNDI.

Temples.

¹ Colonel Meadows Taylor. See above p. 395.

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Places.

Inscriptions.

destroyed by trees growing on the roofs, and by the materials and sculptures being carried off for building purposes. Besides for its temples. Lakkundi is noted for its step-wells built in the Jakhanáchárya style. The chief of these wells are the Chhabirbhánvi, Kanner-bhánvi, and Musukin-bhánvi. The best is the Musukin-bhanvi well near Manikeshvar's temple. Three flights of steps lead down on three sides to the water. On the fourth side is a bag for drawing water. Projecting from the sides just above the water are small canopied niches.1 There is also a ruined fort in and about which are five inscribed stones one of them under a tamarind tree dated 1120. There are six other inscribed stones in different parts of Lakkundi, the inscriptions on which except one dated 868 near the Kanner-bhánvi well have not been made out. Its numerous temples, some of them as early as the ninth and tenth centuries, and its thirty-five inscriptions, probably the largest number found to exist at any one place in the Bombay Karnátalk districts, show that between the ninth and the fourteenth centurids Lakkundi was an important town. Of the thirty-five incriptions the fourteen whose dates have been read vary from 868 to 1241;2 three of these dated 1172, 1174, and 1175 probably belong to the reign of the Kalachuri Bijjala's son Someshvar IV. (1167-1175), while two dated 1184, and one dated 1186 probably belong to the last Western Chalukya king Someshvar IV. (1183-1192) who for a time re-established Chalukya supremacy after it had been usurped (1161-1183) by the Kalachuris. In 1192 the great Hoysala king Ballal II. better known as Vir Ballal (1191-1211) established himself at the capital of Lokkigundi (Lakkundi), and, according to a tradition, between 1187 and 1192 Lakkundi was the scene of a battle between Ballal II. acting as the commander of his father's forces and Jaitugi the son of the Devgiri Yádav Bhillam

Madanbhávi,

Madanbha'vi is a large village fifteen miles north-west of Dharwar, with in 1881 a population of 1387. It has temples of Ramlingdev and Kallapdev the former in ruins and the latter small. Each of the temples has an inscription.

(1187-1191), in which Jaitugi was worsted.3

Makarvalli.

Makarvalli is a small village eleven miles south-east of Hangel with in 1881 a population of 440. Near a pond is an inscribed pillar called Garud Khamb or the Vulture's Pillar dated 1399.

MALGUND.

Malgund, a village eight miles south-east of Hangal with in 1881 a population of 645, has a temple of Kalleshvar with an inscription dated 1115.

MANGUNDI.

Mangundi, a large village on the Dhárwár-Yellápur road, siz miles south of Dhárwár, with in 1881 a population of 1689, has ruined black stone temples of Siddhaling and a small black stone temple of Kalmeshvar. Each temple has an inscription.

¹ Mr. Henry Cousens, Head Assistant, Archmological Survey.

2 The details are two dated 868, one each dated 1116, 1118, 1120, 1123, 1172, 1174, and 1175, two dated 1184, and one each dated 1186, 1198, and 1241.

2 Flect's Kanarese Dynastics, 68, 72.

Mankatti, a small village four miles north of Shiggaon, with in 1831 a population of 803, has a temple of Solbeshvar with three inscriptions on its pillars.

Mantigi, a small village six miles south-east of Haugal, with in 1881 a population of 624, has an inscription dated 1165.

Mantrava'di, a small village four miles east of Shiggaon, with in 1881 a population of 459, has three inscriptions one $(5'\times3')$ in front of a temple of Hanuman the second $(4'9''\times2')$ near the east gate of the village and the third $(1'6'\times1')$ in the court of one Raman Bhandari's house. One of them is dated 865 (8. 787) and belongs to the fourth Rashtrakuta king Amoghvarsh I. (851-877).

Masur, a large village about seven miles south-east of Hirekorur, with in 1881 a population of 2616, has a ruined fort and a weekly market held on Sunday when rice and chillies are chiefly sold. According to a Persian and Arabic inscription stone built into the outlet of the Madag lake the fort was built in 1635 by Muhammad Khán bin Rúja Farid an officer of the seventh Adılsháhi king Mahmud (1626-1656). The large artificial Madag lake is about three mile-south-west of Masur almost entirely within Maisur limits but largely used for Dhárwár irrigation.2 The lake is believed to have been designed and built by the Vijaynagar kings. To the upper shice of the lake a tradition of human sacrifico is attached. Being the crowning point or finishing touch of the great work the Vijavnagar king and all his courtiers had assembled to see the erection of the first of the twenty-two monoliths for supporting the sluice. But all the effects of the workmen failed and though day presed after day the pillar would not move. A rumour got round that the goddess presiding on the lake was angry and that nothing but a human sacrifice would satisfy her. Lakshmi a virgin daughter of the chief digger stepped forward and she having been buried alive below the site of the stone no further trouble was found in creeting it.3 In a revenue statement of about 1789 Masur appears under the Bunkapur sarkar as the head-quarters of a pargana or sub-division yielding a yearly revenue of about £1500 (Rs. 15,000).4

Medleri, a large village on the Tungbhadra eight miles northeast of Ranchennur, with in 1881 a population of 2055, is noted for Chapter XIV.

MANTIGI.

MANTEAVÁDI.

MASUR.

MEDLIEL.

^{**}Plot to Kanarezo Dynastics, 25, 2 See above pp. 200-263. The stones of Masur fort have been largely used in relabling the Madag dam. The Perana and Arabic inscription may be translated: With the name of God who lithe most merciful of the merciful, do I begin. There is no god but God and Muhammad whis Proplet. This impregnable fortress was built in the ream of Sult in Mahmud Addishib bin Ibrahim Addishib. May his kingdom be to ind. Who is the asylum of faith of justice and of mighty power. The writer of this in ription Muhammad Khān bin Raja Farid the chief of the kings servants I am glately excite I hims. If in abolishing inidelity and establishing Islim in which one may most with the best in bith worlds, by the inspiration of God and his own rangle layer this fortress distinguished for victory in H. 1042 (a.p. 1632) for this hat faithfulness and comment revices have been fully appreciated by the king and the public. This fort was finished in H. 1045 (a.p. 1635). All wished for success is from tool. Let all Muhammadans know the glad news that God is the only guardian and he is the most merciful of the merciful. Mr. R. B. Joyner, C. E. and the faithfulness and continued to the merciful. Mr. R. B. Joyner, C. E.

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its melons and blankets. The melons are mostly used locally. The blankets are sold in the Byadgi market about fifteen miles to the west. An irrigation reservoir to hold 57,600,000 cubic feet of water has been built by Government in Medleri village.1

MEDUR.

Medur villago, eleven miles south of Kod, with in 1881 a population of 1120, has temples of the goddess Nilamma of Billeshvar and of Basappa. Basappa's temple has two inscriptions dated 1033 and 1047, and Billeshvar's temple has a hero-stone or virgal dated 1264.

MEYUNDI.

Mevundi, a small village eighteen miles south-east of Gadag. with in 1881 a population of 993, has a temple of Vyankatraman with to the right of the image an inscription dated 1266.

MISHIKOTI.

Misrikoti, a large village on the Hubli-Kalghatgi road eight miles north-east of Kalghatgi, with in 1881 a population of 3226, was the head-quarters of a sub-division till 1838 and of a pettydivision till 1862. A weekly market is held on Fridays when rich is chiefly sold. Misrikoti has a large fort and a black stone temple of Rámeshvar with an inscription. During the Third Marátha War Misrikoti surrendered to Brigadier-General Munro on the 15th of January 1818.2

MOTIBENNUR.

Motibennur, on the Dharwar-Harihar road about twelve miles north-east of Ranchennur, is a large village with a travellers' bungalow and, in 1881, a population of 2621. In 1790 Captain Moor the author of the Hindu Pantheon describes Motibennur as a market town of some extent and importance enclosed by a ditch and a wall of no strength. There were some handsome stone houses and a brisk traffic with Mysore chiefly in sandalwood. The market has ceased and the town seems to have declined. Close to the village is an unique megalithic structure apparently the remains of an enormous dolmen consisting of large rough unhown stones resting horizontally on upright stones.4

Mudur,

Mudur village, eight miles south of Hangal, with in 1881 a population of 937, has in front of a temple of Brahma a hero stone or virgal with an inscription dated 1126. Outside the village is a temple of Mallikarjun with an inscription dated 1137.

MUGAD.

Mugad, seven miles west of Dhárwár, is the head-quarters of the Devar Hubli petty division, with in 1881 a population of 1512. In the neighbourhood of Mugad is an old artificial lake repaired by the British Government in 1849-50 and 1877-78. It is largely used for irrigation purposes.5

MULGUND.

Mulgund, about twelve miles south-west of Gadag, with in 1881 a population of 5386, is an old town with several temples and inscriptions. Till 1848 when through failure of heirs it lapsed to Government, Mulgund belonged to the chief of Tasgaou. Till 1862 Mulgund was a petty divisional head-quarters. The 1872 census showed a population of 6844 of whom 5364 were Hindus and 1480

commit!

¹ Compare

¹ Mr. R. B. Joyner, C. E.

² Blacker's Marátha War Memoir, 287.

³ Narrative of Captain Little's Detachment, 241-242.

⁴ Mr. R. R. Joyner, C. E. ⁵ See above pp. 258-263.

Musalmáns. The 1881 census showed 5386 people or a decrease of 1458. Of these 4421 were Hindus and 965 Musalmans. are nine chief temples, five Brahman and four Jain. The five Bráhmanic temples are to Kálbhairav, Kumbeshvar, Nagaresh, Pete Basappa, and Siddheshvar; the four Jain temples are of Chandranáth, Parshvanath, Hiri, and a fourth of which the name is not Kúlbhairav's temple has a large Bhairav inside, and known. two inscriptions; Kumbeshvar has an inscribed stone sunk in the earth; Nagaresh has two inscriptions, one in front of the temple door dated 1062 and the other in the wall outside to the left of the temple whose date has not been made out; Pete Basappa has two worn-out inscriptions dated 1207. Siddheshvar has in the temple court, to the left of the entrance, a rudely cut inscription on a narrow stone. Chandranáth's temple has three inscriptions, one dated 902 belonging to the Rashtrakuta king Krishnavallabha or Krishna II. (875-912),1 the second dated 1275 records the death of Bhamatti wife of one Madaras ruling at Mulgund, and the third on a pillar in the temple bears date 1675. Behind the temple is a large rock with an unfinished carving of a figure twenty-five feet long and an inscription partly worn out. The Hiri temple has two inscriptions one of them dated 1275. The unnamed Jain temple has two inscriptions dated 902 and 1053. Three other inscriptions remain in Mulgand, two in a monastery called Andánsvámi's math both dated 1224, and the third dated 1170 is in a private house. To the cast of the town is a small hill about 300 feet high where a large fair is held in Kartik or November-December. People take to the hill top a slipping stone or jarbandi and let themselves down on it.º

Mundargi, about twenty-four miles south-east of Gadag, is the head-quarters of a petty division with in 1881 a population of 3826, of whom 3328 were Hindus and 498 Musalmáns. The town lies at the base of a small hill on which stands a rained fort. Its position on the Dhárwár-Nizám frontier has helped Mundargi to grow into a large market town with many shops and a market where chillies, molasses, tamarind, and turmeric are chiefly sold.

In 1842 a committee of inspection described Mundargi fort as on a rocky hill about 250 feet high, with a steep and much exposed a cent. The fort defences were irregular about 160 yards long by 100 broad. They included bastions connected by a wall five or six feet thick, with narrow ramparts, built of loose stone but sufficient to hold matchlock-men. The works were about sixteen feet high, and some of the bastions were able to hold guns. The works high, and some of the bastions were able to hold guns. The works were in fair order and entirely commanded the hill which had mo cover. There were two entrances to the fort one much rained to the north with two gateways; the other on the west, a single small door in bad order. There was a good supply of water from a pond which held water throughout the year. The interior had no houses and no inhabitants and was perfectly exposed to hills. The committee found that though the fort defences were of little

Chapter XIV.
Places
Mulgund.

MUNDARGI.

Fort.

¹ Compare Flect's Kánarcse Dynastics, 35-36. ² Ráv Bahádur Tirmalráv Venkatesb.

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MUNDARGI.

strength, as the ascent up the hill was much exposed a determined garrison might give much trouble. Before the 1857 Mutinies Mundargi was under a hereditary district officer named Bhimrav Nadgir. From some grievance, real or fancied, this man was in concert with the mutinous Brahman chief of Nargund and murdered a British guard which had been placed over some of his ammunition and stores. He fled to Kopal in the Nizam's territory about twenty-five miles north-east of Mandargi and was killed in the siege of that town. Bhimrav's private villages of Bennihalli and Haitspur were confiscated.

Munyalli.

Munvalli, a small village one mile north-west of Bankapur, with in 1881 a population of 156, has three inscriptions two in the village and the third in a field close by.

MUTTUR.

Muttur, a small village about nine miles north-west of Kod, with in 1881 a population of 552, has a granite temple of Shiv about, thirty feet long by fifteen broad with a small shrine. The temple is built of black granite, with a roof supported on thirty-two pillars and walls carved with numerous figures. It has recently been repaired with brick and enjoys a Government grant. In front of the temple are eleven stones one of them a hero-stone or virgal with an inscription dated 1382.

NAGAMYE,

Na'ga'mve, five miles south-east of Gadag, with in 1881 a population of 864, has a temple of Mahábaleshvar with four inscriptions, dated 1207, 1211, 1214, and 1255. The second belongs to the reign of the Hoysala king Ballál II. or Vir Ballál (1102-1211), and the fourth to the reign of the Devgiri Yádav king Krishna (1247-1260).²

NAGYAND.

Na'gvand village, about fifteen miles south-east of Kod, with in 1881 a population of 1110, has on the bank of a pond an inscription dated 1120.

NAREGAL.

Naregal, a large village fourteen miles north-east of Hángal, with in 1881 a population of 1340, has an old temple and eight inscriptions. The temple of Sarveshvar is said to be very old; its roof is supported by twenty-four round polished pillars. Naregal has also a famous reservoir and small temple of Basappa. The reservoir is the largest in the Hángal sub-division and has an area of 302 acres. It is supplied with water by the Kanchineglur canal. There are four inscriptions in and about the Sarveshvar temple, three of them dated 1077, 1125, and 1130. Near the reservoir are three more inscriptions two on hero-stones or virgals dated 1099 and 1150 and one on a broken stone on the wall of its sluice dated 1186. The temple of Basappa has an inscription dated 1273. In a revenue statement of about 1790 Nurgul probably Naregal appears under the Bankápur sarkár as the head-quarters of a pargana yielding a yearly revenue of £5437 (Rs. 54,370).

NAREGAL.

Naregal, ten miles south-east of Ron, with in 1881 a population of 6071, is an old town with temples and inscriptions. The 1872 census showed a population of 5182 of whom 4668 were Hindus and

¹ See above pp. 434-437.

² Fleet's Kanarese Dynasties, 67, 73.

511 Musalmans. The 1881 census showed 6071 or an increase of 889 of whom 5122 were Hindus and 649 Musalmans. Naregal has a weekly market on Mondays and blackstone temples of Chandramulleshvardev, Kalmeshvardev, Someshvardev, and Tripurantakeshvar and a fifth black-tone temple of Molle Brahmadev in the neighbouring handel of Kodikop. Someshvar's the chief temple has two halls, a shrine beyond them, and two long shrines one on either side of the first hall which is open in front. In these side shrines a long alter or bench runs the length of the back wall, the front of which is moulded. Along the top of this altar is a row of sockets for detached images and about the middle of the west shrine are two images in their places. On either side of the doors of these shrines is a panel of open screen work of a pretty diaper design. The pillars of the outer hall me much like those in the Dambal porch, star-shaped in plan with the corners running up through all the horizontal mouldings of base shuft and capital. The outer face of the templo has nearly all been thrown down, and mud walls have been built in and around it.1 There are seven inscriptions, one of fifty-eight lines in Kalmeshvarder's temple, and another of forty-seven and a half line in Tripurantake-hvar's temple. Both are in the times of the Sinda chief Permadi I. (1104-1144) and record grants by village officers made in 950.2 The third inscription in front of a temple of Hannman to the west of the ruined Naregal fort bears date 1044. The fourth is dated 1100, and the fifth is of the time of the Sinda chief Permadi dated 1101. The sixth and seventh are hero-stones or ringale dated 1197 and 1290. The Kodikop temple of Mollo Brahmadev has two inscriptions. One, of which twenty-nine lines can be made out, is built into the wall on the right of the templo It belongs to the Sinda chief Achugi II. (1098-1122) a feudatory of the Western Chalukya king Vikramaditya VI. (1075-1126) and records a grant made in 1122. The inscription shows that Achugi was governing the Kisukada Seventy and towns the chief of which was Nareyangal reveral other Abbegere the chief town of the Narcyangal Twelve which was The other inscription is in in the Belvola Nine-hundred. thirty-seven lines to the left of the temple door. It is dated 111f and belongs to the Sinda chief Permadi I. a feudatory of the Western Chilukya king Jagadekmalla II. (1138-1150). This and the other three Naregal inscriptions of Permadi I, show that his capital was Erambarge perhaps the modern Yelburga in the Nizam's territories thirteen miles east of Naregal, and that he had the government of the Kisukád Seventy, the Kelvádi Three hundred and the Nareyangal Twelve, as the feudatory first of the Western Chálukya king Vikramáditya VI. and then of his son Jagadekmalla II. The inscriptions record that Permidi I. defeated the Gon Kadambas (1007-1250), and the Hoysala Ballals (1197-1210) besigging the city of Drara amudra or Halebid in West Maisur.

Places.
NARFGAL.

Temples.

Inscriptions.

For J. Burgers.

Compare Fleet's Kauarese Dynastics, 96.

Kruk to hierally means a ruby forest. The name appears not to be known now;
but it exidently denoted the country Ising round Kisuvolal literally ruby city, which
is Pattyda-Kisuvolal or Pattadakal in Bijapur twinty-five miles east of Naregal.

Kelaaders perhaps the modern Kelaade in Bijapur ten miles north-east of Badami.

Chapter XIV.
Places.
Namendaa

Narendra, a large village five miles north-east of Dhárwár, with in 1881 a population of 2114, was a petty divisional head-quarters under the Peshwás. The village has a temple of Shankarling rebnit, by the villagers. On a mound between the temple and the road is an inscribed stone tablet of the Goa Kádambas (1007-1250). In 1827 Captain Clunes notes it as Nurendra on the Belgaum-Dhárwár road, a post runners' station with 994 houses, thirteen shops, and wells.

NARGUND,

Nargund, 15° 43' north latitude and 75° 27' east longitude on the Hubli-Bijapur road about twelve miles north of Navalgund, is the head-quarters of the Nargund petty division, with in 1881 a population of 7874. The town lies at the foot of a high steep hill which suddenly rises nearly 800 feet from the plain. The town is ill built and dirty and contains the palace of the late chief which is now used as the office of the petty divisional officer. The 1872 census showed a population of 9931 of whom 8622 were Hindus and 1309 Musalmans. The 1881 returns showed 7874 or a decrease of 2057, of whom 6825 were Hindus and 1049 Musalmans. Besides the revenue and police offices of the Nargund petty division, Nargund has a post office, a municipality, a ruined hill fort, and temples. The municipality was established in 1871. In 1882-83 it had an income of £179 (Rs. 1790) and an expenditure of £214 (Rs. 2140). The chief sources of income are house and other taxes, and most of the expenditure is on sanitation water-supply and roads. The water-supply is chiefly from three ponds called Halbhavi, Kumbar, and Padvangond, of which it is proposed to enlarge the Halbhavi pond when funds allow. Nargund, though not a manufacturing town, is a busy trade mart where merchants from Dhárwár and North Kánara exchange rice sugar and spices.

Fort.

The ruined fort is on the Nargund hill 388 acres in extent. hill stands by itself, its sides are rocky and its top flat, while the lower slopes are covered with prickly pear. The way up is by a steep ascent about a mile and a half long with steps at the top. On the bare top are five unused ponds and remains of buildings granaries and magazines. There is also a temple of Venkatesh but no cannon. In 1826 a committee of inspection described the fort as very irregular and covering the top of a high rocky hill. The works appeared to have been faced with stone without cement. All round the fort the country was cultivated and the soil fit for cotton. In the hot season water was scarce. A second committee of inspection in 1842 described Nargund hill as lying north-west by south-east in a large plain of cotton soil almost waterless in the hot season. The hill was about 600 feet high at the end, and a little depressed in the middle, and had a plain top about 1200 yards long by fifty to 200 feet broad. To about half-way up the hill rose from the plain at nearly an even slope of thirty-five to forty feet. In the upper half the rocks rose sheer, in some places in tiers of natural scarps, one over the other, in other places in one sheer scarp of great height. The entire crest of the hill was fortified with stone bastions and

¹ Fleet's Kanarcse Dynasties, 90. ² Itinerary, 27. ² MS, Report.

curtains, in some places in double lines. The works were in good order and though of no great height, coupled with the natural bold character of the rock, they made the fort look impregnable to assault. The south-west end was formed into a citadel by a stone curtain built across the crest of the hill. It contained one large strong gate leading into the outer fort. The bastions and works in the citadel were all in good order and capable of holding ordnance. The citadel overlooked the town and the rock on which it was built was the holdest point of the hill, a perpendicular scarp of very great height. The fort had two entrances, both from inside the citadel. One ran up the north-cast side of the hill, the other led by a pathway up the conth-west side. The north-east was the chief entrance and passed through strong gates well flanked and defended by bastious and loopholed walls. The ascent near the gates was steep and stony. In the south-west entrance was a small gate with two small strong doors leading through a small rock-cut galler;. The fort contained two large cisterns holding much water and remains of a number of honses. In the citadel was a palace with a few lines and store-rooms for arms and ammunition. Some pieces of ordnance were mounted on carriages but not in good order. A few guards lived in the citadel. The committee were of opinion from its natural strength and from its efficiency for defence that the fortress was capable of making a strong resistance, specially because there were no heights attached to the hill and no available positions for batteries, while the great extent of the fort made mortars of no use. The only chances of attack were by a daring entrance by the main gate or an attempt 'to e-calade the west point of the fort where the hill slope ran almost to the foot of the works, where however the works were double. The committee considered the fort one of the strongest in the Bombay Karnátak. If well defended its capture would require much time and trouble and a large invading force.

Nargand has a large temple of Shankarling and a smaller temple of Mahabaleshvar, both built of black stone and a small temple of Joda Hammant with an inscription dated 1147. The temple of Youkatech on the hill top in the fort was built in 1720 by Ramrav, the founder of the Ramdurg chiefship, at a cost of £10,000 (11. 1,60,000) and enjoys a yearly grant of £221 (Rs. 2210) in land and (132 (Re. 1320) in cash. In 1792 when the Ramdurg estates were divided, the temple with its endowment was made over to the Narround branch. In 1858, in the sack which followed the flight of the Nargand chief, the temple was desecrated and the idol broken. When the Mutmy troubles had passed the Ramdurg chief spent a Jure unn in consecrating his ancestral temple and in consideration of the interest he took in it Government entrusted the temple with its endowment to the charge of the Ramdurg family. A yearly fair in honour of the god attended by about 10,000 people is held on the ful-moon of Ashvin or September-October and lasts for twelve days.

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Places.

NARGUND.

Fort.

Tempb <

I Rami'a ternd to have built the temple at the desire of his family god Venkatesh. The pol, wishing in vive Rami's from the trouble and fatigue of a long journey to his the tend of thine, appeared to his devotee in a dream and told him that he would be tend of thine, appeared to his devotee in a dream and told him that he would be content if Rami's hample from Lakshuceshvar an image called Keshav Murti and ambinud it in Nargund as Shri Venkateshvar.

Chapter XIV. Places. NARGOND.

A car procession takes place on the last day. The pilgrims come from Gadag, Hubli, Navalgund, and Ron in Dharwar, Badami in South Bijapur, and Saundatti in Belgaum. About £200 (Rs. 2000) worth of goods are sold chiefly catables and bangles. Nargund har four schools three of them two Kanarese and one Marathi for bors. and one for girls. The Nargund priests are believed to have a valuable collection of Sanskrit manuscripts. The collection was made by the late chief Bhaskarray. The Brahmans declare that all were destroyed during the sack of the town in 1858. But it is probable that most of them are still in existence.

History.

The earliest known mention of Nargund is in 1674 when it is said to have been fortified by Shivaji.1 In 1778 when Haidar became master of the whole country south of the Krishna, Norgand was left to its chief on condition that he acknowledged Haidar's supremacy and paid tribute.2 In 1785 by domanding a higher tribute Tipu Sultan estranged Venkatray, the chief of Narguud. As by himself he was unable to withstand Tipu, Venkatrav applied for help to the Bombay Government, and as they were unable to help him he turned to the Court of Poona. When Tipn pressed Venkatrav, Nana Faduavis interfered. He declared that Tipu had no right to exact more than the former tribute, that landholders on the transfer of districts were liable to no additional payments and that the rights of Brahman landholders, except when guilty of treason, were always respected. Tipu replied by sending two bodies of troops to demand more tribute than the Nargund chief could pay and thus give him a pretext for reducing the fort. In March 1785 when news reached Poona that the siege of Nargund was begun, a body of Marathas was sent to relieve Venkatrav. Before the Poona detachment arrived, want of water had forced the Maisur troops to raise the They were still in the neighbourhood and after some skirmishing compelled the Marathas to retire, took Ramdurg about twenty miles north-west of Nargund, and resumed the siege of Nargund. On Tipu's assurance that only the regular tribute would be exacted, the Maratha army re-crossed the Krishna. The siege was pressed with vigour and on the strength of the terms promised by Tipu Venkatra's capitulated. As soon as the fort was taken Tipu broke his promiso, sent Venkutray and his family into captivity and took their daughter into his harom. In 1787, in accordance with the terms of a treaty made with the Marathas, Tipu ceded them Nargund.4 In a Maratha revenue statement of about 1790 Nargund Bahadur appears under the Torgal district as the head-quarters of a sub-division with a revenue of £7500 (Rs. 75,000).6 conquest of the Peshwa's territory in 1818 Nargund was restored to Dadajirav Appa, the chief who was then in possession of it. In 1821 the chief was freed from a tribute of £347 (Rs. 3470) called Kunur Bab, and from rendering any service on condition that he acknowledged British supremacy and acted loyally to them.

¹ Stokes' Belgaum, 42; Bom. Gov. Sel. CXIII. 173. Local tradition also says that the fort was built by Shiváji and called Mahilgad. The traditional date is 1677 or three years after Shiváji's coronation.

2 Wilkes' South of India, II, 187.

3 Grant Duff's Maráthás, 466-467.

⁴ Grant Duff's Marathas, 472.

⁵ Waring's Marathas, 243.

1827 Nargund town was described as well built with an excellent market in the fair season.\ In 1812 it was described as a large and populous town with a large number of houses. It was surrounded by a mud wall with bastions and curtains in bad order.2 In 1857 the Nargund chief was Bháskarráy Appásáheb, commonly called Baba Saheb, the most intelligent of the Bombay Karnatak chiefs. He had collected a library believed to contain between three and four thousand Sanskrit volumes. He conceived himself grievously wronged by the British Government as he was refused sanction to adopt a son. The idea that his state would be absorbed by the British Government seems to have hung heavily on him and to have made him a leader in the general movement of the time. As Nargund fort was known to be one of the strongest places in the Bombay Karnatak it was deemed politic to ask the chief to send his heavy guns and stores of powder to Dharwar on the plea that in the unsettled state of the country it was advisable to prevent the possibility of their falling into the hands of insurgents. The chief could not refuse to deliver his guns without showing signs of disloyalty. On the 7th of May 1858 all but three of his guns and a large store of powder and saltpetre were received in Dharwar. This attachment of his arms alarmed the chief and led him to suppose that Government were aware of his treasonable plans. Meanwhile news arrived of the revolt of the chief of Mundargi and Bhaskarrav placed guns in position on his fort. A letter which he received about the same time from Mr. Manson of the Civil Service, the Political Agent of the Southern Maratha Country, greatly incensed him and fearing that his treasonable intentions were fully known to the Political Agent, he went with about seven or eight hundred horse and foot towards Ramdurg about twenty miles to the north-west. Learning that Mr. Manson was at Suriban village twelve miles north of Nargond, the chief surrounded the village at night and murdered Mr. Man-on who had an escort of only a dozen troopers. Mr. Manson's head was cut off and fixed by the chief on the gate of Nargund town. The news of Mr. Manson's murder and of the insult to his body reached Dharwar on the 30th May. On the 1st of June a force under Colonel, afterwards Major-General Sir, George Mulcolm appeared before Nargund. A party of 100 horse went to reconnoitre the fort and retired. The armed rabble which the chief had collected to the number of 700 mistook this withdrawal for flight and came pouring out towards the British camp. On seeing the main body of the British force they retreated and wore pursued by the cavalry who sabred them to within 500 yards of the town, inflicting a loss of about sixty killed. Skirmishers were afterwards thrown forward under cover of artillery and by evening the town was taken and the troops were moved forward to the chief's palace. Early next morning a storming party wound up the steep path to the fort gates which they were prepared to blow open. No resistance was offered. The place was found almost deserted as many of the garrison had jumped down the precipico rather than

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Fort Inspection Committee's MS, Report.
 Fort Inspection Committee's MS, Report.

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face the storming party. The chief himself had fled. His track was followed with great energy and skill by Mr., now Sir, Frank Souter, then Police Superintendent of Belgaum, and on the 2nd of June he was found in the Torgal forest with six of his chief followers disguised as pilgrims on their way to Pandharpur. He was taken to Belgaum and was there tried, convicted, and hanged on the 12th of On the 3rd of June a proclamation was issued declaring the Nargund state forfeited.1 The fort was garrisoned for come time by a few British troops which were soon withdrawn. As the hill was well supplied with water, soon after the confication a proposal was made that the water cisterns and a few buildings should be kept in repair and the fort used as a health resort for Dharwar invalids. The fortifications have been dismantled and the fort has been rendered untenable by destroying some of the chief reservoirs.

Narsáper.

Narsa'pur, two miles north-cast of Gadag, is a private or inim village with in 1881 a population of 583. The revenues of the village go towards the maintenance of the temples of Trikuteshvar and Virnárávan at Gadag.3 The village has an old temple and an inscription of the Kalachuri chief Someshvar or Shivdey the son of Biniala dated 1173. The temple has two windows adorned in a somewhat peculiar style with figures in deep relief. The figures seem taken from the Ramayan and Mahabharat and are much like the elaborate sculptures on each side of the porch bare in the Kailas temple at Elura. They are fine examples of the mode in which Hindu sculptors of the thirteenth century carved life in action, conventional and not without many defects, but free from any great extravagance, and telling with sufficient distinctness the tale they are meant to record. The way in which the has reliefs are separated from one another is very beautiful, a dark line admitting light into the interior. But the way of breaking its monotony by medallions at intervals gives a sparkling effect to the whole in a very pleasing manner.4

NAVALGUND.

Navalgund, 15°33' north latitude and 75°25' cast longitude, about twenty-five miles north-east of Dharwar, is a municipal town the head-quarters of the Navalgund sub-division, with in 1881 a population of 7810. The 1872 census showed a population of 2578, of whom 7989 were Hindus and 1589 Musalmans. The 1881 census showed 7810 or a decrease of 1768, of whom 6578 were Hindus and 1232 Musalmans. The municipality was established in 1870. In 1882-83 it had an income of £462 (Rs. 4620), and an expenditure of £618 (Rs. 6180). The income was chiefly from an octroi house and other taxes; the chief heads of expenditure were sanitation roads and water-supply. The water-supply is chiefly from the Nilva pond. The want of a dispensary is hadly felt. There are fifty-two wells all, except one, brackish. They are chiefly used for washing. Among the property of the municipality is a ruined fort called Lalgadi. Navalgund has five schools three

Dr. Fergusson in Architecture of Dharwar and Mysore, 61.

¹ Sir Le Grand Jacob's Western India, 222-226; Bom. Gov. Sel. CXIII. 192-194; Mr. F. L. Charles C. S. from Mutiny Files. See below Sariida.

² Mr. J. R. Middleton, C. S.

³ See above pp. 715-716.

Government and two private. Of the three Government schools, one anglo-vernacular and one vernacular are for boys and one vernacular is for girls. Navalgund is noted for its superior breed of cattle which are chiefly sold at its weekly cattle market on Thesdays; and for its cotton carpets which are exported throughout Dhárwár and the neighbouring districts. Cradles and toys are also made and largely sold.

No remains of old temples or inscriptions have been found at Navalgund and it appears to be a new town. Its carliest mention is in 1451 as the head-quarters of a sarkar or province governed under the Bahmani king Alá-ad-din II. (1435-1457) by his brotherin-law Jalálkhán. In the same year Jalálkhán and his son Sikandar Shah hearing a false report that the king had died, seized on several districts round Navalgund. The king promised a free pardon to the robels if they submitted. Instead of submitting Jalálkhan called for aid to the Malwa king telling him that Ala-ud-din was dead and that the ministers were dividing the kingdom. Malwa king crossed Khandesh and came to the Deccan in 1457 but learning that he had been deceived retreated leaving secret orders to capture Sikandar and bring him to Mandu. Sikandar retreated to Navalgund and on the promise of a free pardon gave up Navalgund fort. In the distribution of governorships and commands which followed the death of Ala-ud-din II, and the succession of his son Humáyan Zelim (1457), Sikaudar Sháh suffored a disappointment and joining his father at Navalgund began to raise troops. He defeated the force sent against him. Then the king advanced in person, and offered to pardon the rebel father and son if they submitted. As they refused to submit, Humayun ordered an The insurgents fought with the greatest bravery. After a long indecisive action the king who was pressing forward in the centro mounted on an elephant was attacked by Sikandar. The king's life was raved by his elephant which seized Sikandar in his trunk, and threw him from his horse. Sikandar was killed and his followers fled. Next day the siege of Navalgund was begun; and at the ond of a week, having no hope of relief, Jalálkhán submitted. His life was spared but he remained a prisoner for the rest of his days.1 About 1690 under Aurangzeb's governor of Savanur Navalgund was the head-quarters of a revenue division managed by an hereditary Linguyat officer called the Desai of Navalgund. In 1747 the Savanur Nawab was obliged to agree to a treaty ceding to the Peshwa the whole of the present sub-division of Navalgund along with other parts of the Dharwar district.2 In 1778 when Haidar Ali became master of the country south of the Krishna, Navalgund was left to its chief on condition that he acknowledged Haidar's supremacy and paid him tribute.3 In a Maratha revenue statement of about 1790 Navalgund appears in the Torgal district or sarkar as the head of a pargana with a revenue of £7512 (Rs. 75,420).4 Between 1795 and 1800 in the struggles which convulsed the Maratha state

Places.
NAVALGUND.

History.

Briggs' Peri-htz, H. 417-456.
 Stokes' Belgaum, 41, 48; West's History, 21.
 Stokes' Belgaum, 55; West's History, 22.
 Waring's Maráthús, 213.

Places.

NAVALGUND.

Bietory.

Dhondho Pant Gokhla took Navalgund and Gadag from their hereditary Desdi.1 In November 1817 General Munro appointed one Ramray as the military officer or amildar of Kavalgund. After his appointment Ramray quickly took posse-sion of more than half the district, and on the 19th of December advanced from near Kayalgund with 500 men to attack Gokhla's son who was in Navalgund with seven hundred horse. About 600 of the horse were picquetted in the streets and in the open space between the town and the fort. The rest were mounted and watching Ramair who advanced at noon so rapidly that he entered the town before the horsemen could mount and leave. Struck with panic the Maratha horse fled without offering any resistance. Aineteen horses were taken alive and twenty were found dead. On hearing of his son's defeat Gokhla came from Badami to join him with 550 horse and 200 foot and after gathering the fugitives reached Navalgund on the 22nd of December. Ramray retired into the fort, and on the 23rd, with ammunition nearly exhausted, he was hardpressed by Gokhla. On hearing that Gokhla had reached Navalgund, General Munro marched from Dharwar with two flank companies one of the battalion guns and a five and a half inch mortar under the command of Major Newall. Within two miles of Navalgand small parties of horse were seen; and about a mile further the main body was discovered moving slowly alongside of a riving ground at the distance of about a thousand yards. As the enemy seemed to intend to attack General Munro's baggage, two shells were thrown and two horsemen were killed. At this the whole body moved off attended by about two hundred foot and were soon out of sight leaving about ten dead in the streets. After the blockade of Navalgund was raised General Munro and Major Novall returned to Dhárwár.2 The desai family of Navalgund enjoy some inim lands. In 1838 on the death of the grandfather of the present chief adoption was allowed on condition that the chief abolished all duties on trade, and assimiliated his administration to the system prevailing in the neighbouring Government villages.

NAVIZ.

Navii, eight miles cast of Navalgund, has a temple of Kalmeshvarder with an inscription.

NILOUND.

Nilgund, a small village twelve miles south-west of Gadag, with in 1881 a population of 819, has a temple of Náriyan built of polished stone with a large hall or mandap in front. The roof of the temple is supported on twelve round and highly carved pillars and the walls are adorned with mythological sculptures. To the east of the north gate of the village is an inscription dated 1014.

NIDGUNDI.

Nidgundi, a small village five miles west of Bankapur, has five inscribed stones varying in length from 4'9" to 2' and in breadth from 2' to 1'6". One of the inscriptions which bears no date belongs to the roign of the fourth Rashtrakuta king Amoghvarsh I. (851-877) and records that his fendatory Bankeyaras of the Chellaketan family had the government of the Banavasi Twelve-thousand, the

¹ Stokes' Belgaum, 63.

² Gleig's Munro, 1, 480-82,

Belivola Three-hundred, the Kundur Five hundred, the Purigere or Lakshmeshvar Three-hundred, and the Kundarge Seventy.

Chapter XIV. Places.

Nidgundi, a small village nine miles east-south-east of Ron, has four small black stone temples of Rámlingdev, Dashameshvardev, Kalmathdev, and Náráyandev.

Nidgundi.

Nidnegal, about ten miles south of Kod, with in 1881 a population of 447, has a temple of Káleshvar said to have been built by Jakhanáchárya. The temple contains two images of Basava and one of Káleshvar. Near the temple are fitten carved stones some of them inscribed.

Nidshingi.

Nidshingi, a small village ten miles north of Hángal, with in 1881 a population of 79, has two inscriptions dated 1109 and 1110.

RANGBENNUR.

Ra'nebennur, 11° 37' north latitude and 75° 41' cast longitude, on the Poona-Harihar road, about eighty miles south-east of Dhárwár, is a municipal town the head-quarters of the Ránebennur sub-division with in 1881 a population of 10,208. Till 1836 when it was merged into the Dhárwár collectorate, Ránebennur was the head-quarters of a sub-collectorate. Besides the usual sub-divisional revenue and police offices Ránebennur has a municipality and a travellers' bungalow. In 1882-83 the municipality had an income of £420 (Rs. 4290) chiefly raised from octroi house and other taxes; and an expenditure of £520 (Rs. 5200) chiefly on conservancy roads and water-supply.

The 1872 census showed a population of 11,623 of whom 9328 were Hindus and 2295 Musalmans. The 1881 census showed a fall of 1421 that is a total of 10,202 of whom 8398 were Hindus and 1804 Musalmans. Ranchennur is noted for the excellence of its cotton and silk fabrics which are largely exported to the neighbouring districts. There is a considerable trade in cotton and a weekly market is held on Sundays. The town has five schools, a temple, and a Musalman saint's tomb. Of the five schools, three are Kunnrese and one Hindustani, and one is a girls school. lump pillar of the temple of Siddheshvar is an inscription dated 1489 giving the names of some of the Vijaynagar kings. The Musalman tomb is said to belong to a saint Hazrat Jamalshah Walo who came from Ajmir about 1785. The saint wore bangles up to his elbows and used to lead by one string a mouse a cat a dog a stag a snake and a mungoose. A large gathering of people chiefly of the town Musalmans takes place at the tomb during the Muharram week. The tomb was repaired about 1850 at a cost of about £500 (Rs. 5000). The roof is supported on forty stone and numerous wooden pillars.

In 1791 Captain Moor describes Ranebennur as a market town of some extent and importance with large gardens and groves to the cast and north.² While in pursuit of the Maratha freebooter cast and north.² While in pursuit of the Maratha freebooter Dhundin Vagh, Colonel Wellesley arrived before Ranebennur on the 27th of June 1800 with cavalry and advanced picquets. The garrison fired on the cavalry and an attack was ordered. The

Chapter XIV. Places. Ránebennur.

assault was made by advanced picquets of fifty Europeans and 150 natives under the command of Lieutenant-Colonel Monypenny and the leading battalion the first of the line. Colonel Stevenson posted cavalry round the fort to cut off the garrison's retreat, and Lieutenant Colonel Monypenny led the attack with such dash that the place was escaladed without the loss of a man. Most of the garrison of 500 men were killed. The town was given to Appa Saheb. Colonel Wellesley remained six days at Ranebennur, and on the 2nd of July left for Haveri on his way to Savanur. On the 11th of October 1818 a party of General Munro's force occupied Ranebennur.2

RATTIHALLI.

Rattihalli, about ten miles south-cast of Kod, is a large village with in 1881 a population of 2332. Till 1864 when it was transferred to Hirekerur, Rattihalli was the head-quarters of the Kod sub-division. Rattihalli has a ruined fort and a temple of Kadambeshvar in the Jakhanáchárya style, built of sculptured slabs, and with three domes supported on thirty-six pillars. There is a weekly market on Fridays when chillies are chiefly sold. There are seven inscriptions in the village varying in date from 1174 to 1550. Four of them are in the temple of Kadambeshvar two on either side of the fort gate and one on the left of the village gate. The inscriptions in the temple are one dated 1174 in the reign of the Kalachuri king Someshvar (1167-1175),3 two dated 1238 in the reign of the Devigiri Yádav king Singhana II. (1209-1247), and one dated 1298 in the reign of the great Ramchandra or Ramdev (1271-1308) of the same The inscriptions on the fort gate are dated 1547 and 1557, and on the village gate 1550, probably referring to the building of the fort and the village wall in the reign of the eleventh Vijaynagar king Sadáshivráy (1542-1573). In 1764 in the war between Haidar and the Marathas, Rattihalli was the scene of a signal rout of Haidar's army. Uniting with the force under his general Fazl Ullah, Haidar took a strong position at Rattihalli with 20,000 horse and 40,000 foot of which one-half were disciplined infantry. The fourth Peshwa Mádhavráv (1761-1772) gaining through his cavalry correct information of the strength of Haidar's position determined not to attack it and instead employed his troops in driving out Haidar's garrison from the towns and villages north of the Varda. In the hope of bringing on a general engagement Haidar moved with 20,000 men intending to retire and draw the Maráthás towards the strong position which Fazl Ullah held with the main body of the army. The Marathas threw out a few bodies of skirmishers who, retiring as he advanced, drew Haidar forward until their parties, always going away but steadily thickening, at last formed solid masses of horse, which gradually moved round Haidar and his camp and, not without heavy loss, forced him to turn his feigned retirements into a real retreat.

Wellesley's Supplementary Despatches (India, 1797-1805), II. 34-39. Fourteen of the despatches are dated Rance Bednore, 27th June to 2nd July 1800. Blacker's Marátha War, 59 - 60.

About 1193 Rattapalli or Rattinalli fort was besieged by the great Hoysala king Ballal II. (1191-1211). Fleet's Kánarese Dynastics, 58, 61, 73, 74.

Wilkes' South of India, I. 461 - 465; Grant Duff's Marathas, 330 - 332.

Ron, 15° 48' north latitude and 75° 48' east longitude, about fifty-five miles north-east of Dhárwár, is the head-quarters of the Ron sub-division, with in 1881 a population of 5229. Till 1869 when it was transferred to Gadag, Ron had a subordinate judge's court. Ron has seven small black stone temples. In one, the temple of Chameshvardey, is an inscription dated 1180.

Sangur, a small village on the left bank of the Varda about twelve miles south-west of Karajgi, has a small temple of Ishvar with a roof supported on two octagonal pillars. The village has also a temple of Virbhadra and a rained fort. Virbhadra's temple has two inscriptions dated 1164 and 1412. On the bank of the fort ditch is a hero-stone with an inscription dated 1234 and near it are two inscribed stones one dated 1264 and the other a fragment.

Sa'tenhalli, about ten miles north-west of Kod, with in 1881 a population of 523, has a large temple of Ramling and smaller temples of Hanuman, Harihar, Kallappa, and Narayan. The Ramling temple has three inscriptions one on the south dated 1114, another on one of a row of stones also to the south of the temple dated 1203, and the third on a monumental hero-stone or rirgal also dated 1203. Kallappa's temple on the bank of the Chikkonati reservoir about half a mile from the village has an inscription dated 1142. The Harihar temple has an inscription dated 1203 of the time of the Hoysala king Vir Ballal or Ballal II. (1191 - 1211). The inscription shows that Kamdev the last Banavási Kádamba chief, though subjugated by Vir Ballál was Náráyan's temple has an inscription making active resistance.1 dated 1210, and outside the village in a row of stones is a here-stone or virgal dated 1203. Leaning against the wall of Hanuman's temple is an inscribed stone dated 1580.

Savdi, a small village five miles south-west of Ron, has a temple of Brahmadov and Náráyandov each with an inscription. The Brahmadov temple is said to have been built of stone brought from Bádámi in Bijápur. The roof of the temple is supported on numerous carved pillars and the outer walls are adorned with paintings.

Shiggaon, 14° 59′ north latitude and 75° 18′ east longitude, on the Poona-Harihar road, about forty miles south-east of Dhárwár is the head-quarters of the Bankápur sub-division, with a district bungalow and a population in 1881 of 4094. A weekly market is held on Wednesday. Shiggaon has temples of Kalmeshvar and Basappa and ten inscriptions. One in the temple of Basappa is dated 1121; of the others, four of which are in the temple of Kalmeshvar, the dates have not been made out.

Shringeri, a village about six miles south-west of Hangal, has an old stone weir across the Dharma river. The weir forms the head-works of an old canal seventeen miles long irrigating over 7000 acres of garden and terraced land and feeding eighty-nine old reservoirs. The weir seventeen feet high and forty feet broad at top and about 100 feet long is founded on a lodge of rock. It is

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Ron.

SANGUR.

Sátenhalli.

SAVDI.

SHIGGAON.

SHRINGERI.

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built of old carved temple stones said to be brought from Hangal. One of the stones has an Old Kanarcse inscription of ninety-two lines fairly legible. There are parts of similar inscriptions on three other stones fixed upright.¹

SIDENUR.

Sidenur, a small village about ten miles north of Kod, has a temple of Kalleshvar with an inscription slab.

SIRGOD.

Sirgod, about eight miles south-west of Hangal, with in 1881 a population of 1158, has temples of Kalleshvar and Ishvar. In front of the temple of Kalleshvar is a hero-stone or virgal with an inscription dated 1143. In the temple of Ishvar is an inscription dated 1187.

SIRUR

Sirur village, four miles south-east of Gadag, with in 1881 a population of 891, has temples of Maligi-Ishvasar and Torangalla-Brahmadev and four inscriptions. Two of the inscriptions dated 1040 and 1042 are in Torangalla's temple; one dated 1273 is in Maligi's temple and the fourth dated 1048 is at a gate called Kuruvagalagasi.

SITIROND.

Sitikond, about eight miles west of Kod, has an inscribed stone on the edge of a rice field to the east of a reservoir dated 1048. Just below the inscribed stone is a sati stone.

SOBATUR.

Soratur, a large village about ten miles south of Gadag, with in 1881 a population of 2375, has Shaivite temples of Ishvar Malleshvar and Virbhadra and a Jain temple. There are five inscriptions in the village one dated 869 in the reign of the Rashtrakuta king Amoghvarsh I. (851-877) and giving the name of his feudatory Ahaváditya; another dated 951 is in the temple of Virbhadra and belongs to the Rashtrakuta king Krishna IV. (945-956). It gives the name of the village as Saratavura the city or village of lizards. A third dated 1071 is in the Jain temple, a fourth dated 1091 in the temple of Ishvar, and a fifth dated 1107 in the temple of Malleshvar. About 1193 Soratur was the scene of a Devgiri Yadav defeat by Narsimh the son of the great Hoysala king Ballál II. or Vir Ballál (1194-1290).

Sudi.

Sudi village, about nine miles north-east of Rop, with in 1881 a population of 1993, has a fort, temples, and inscriptions. There are three temples of Basvanna with an inscription dated 1084; one the Jodu Kalashada Gudi or the Two Spire temple with three inscriptions, one dated 1010 in the reign of the Western Chálukya king Vikramáditya V. (1010 - 1018), another dated 1059 and the third dated 1130; and one of Mallikárjun with one inscription dated 1068 in the reign of the Western Chálukya king Someshvar II. (1068 - 1075). There are two inscriptions dated 1069 and 1084 in a field outside the village and an inscription in the fort dated 1180 and belonging to the Kalachuri chief Sankama (1177 - 1180). Sudi has a little trade in cotton thread.

SUL.

Sul village, on the Dharwar-Gadag road, with in 1881 a population of 1749, has a large temple of Kalmeshvar and four inscriptions the dates of which have not been made out.

¹ Mr. R. B. Joyner, C. E.

² Fleet's Kanarese Dynasties, 35, 37, 68.

Suriba'n, a small village in Ramdurg territory about twelve miles north of Nargund, is noted as the place where in 1858 Mr. Manson, Political Agent of the Southern Maratha Country, was murdored by the Nargand chief. Mr. Manson, who was in the prime of life, intelligent energetic and decided, had incurred much ill-will from his connexion with the Inam Commission, but his frank and kind disposition gave him considerable influence with the Bombay Karnatuk chiefs. Hearing that the Nargund chief had placed guns on his fort, Mr. Manson moved with great speed to the threatened quarter, leaving his escort behind and taking with him only a dozen troopers of the Southern Maratha Horse. He came to Rámdurg where the chief a half brother of the Nargund chief received him cordially but advised him not to go to Nargund or through Nargund territory as the country all round was unsafe. In spite of this warning at five on the evening of Saturday the 29th of May Mr. Manson set off through the Nargund territory towards Dharwar with an escort of twenty-one men. He pressed forward that night to Suriban about ten miles south of Ramdurg and lay down in his palanquin which had been placed on the raised platform of a rest-house. Meanwhile the Nargund chief who was greatly incensed at a letter sent by Mr. Manson from Randurg and who feared that the Political Agent had full knowledge of his treason went towards Ramdurg with seven or eight hundred horse and foot. On the way, hearing that Mr. Manson was at Suriban, he turned aside and came to the village about midnight. A band of armed mon sont by the chief surrounded the village, came close to the spot where Mr. Manson and his party were asleep, killed the sentry and rushed upon Mr. Manson. Mr. Manson roused from eleep in his palauquin fired his revolver at his assailants and wounded one, but was immediately overpowered in the palanquin, his head was cut off taken to Nargund and exposed on the town gate, and his body was thrown into the fire that had been kindled by his Ten of Mr. Manson's party were killed and eleven wounded. On the 30th of May Lientenant LaTouche came from Kaladgi to Surikin with a purty of the Southern Maratha Horse and recovered Mr. Manson's body which was partly burnt, took it to Kaladgi where it was temporarily interred and finally sent to Bombay.2

Tadas is a large village on the Dharwar-Kanara frontier, about ten miles north-west of Shiggaon, with in 1881 a population of 2701. It lies on the Dharwar-Kumta road and has a Collector's bungalow. Till 1862 it was the head-quarters of a petty division. In 1827 it had 231 houses, ten shops, a temple, and wells.

Togur, about fifteen miles north-west of Dharwar, is a large village on the Dharwar-Belgaum road, with in 1881 a population of 1791. Tegur has a travellors' bungalow and an excellent camp for troops. Large quantities of iron ore are smelted in the village. The village has a temple of Kareva in great local repute. Outside the village is a den sacred to the goddess. In a table of military

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EAGAT.

TEGUR.

See above Rargund. Clunca Hinerary, Appendix, 87.

Mr. J. R. Middleton, C.S.
 Rav Bahadur Tirmalrav Venkatesh.

· Chapter XIV. Places. routes prepared in 1862 Tegar appears as Taigoor with 500 houses, a market on Fridays, eight shops, seven wells, ponds, and a water-course. The camping ground is dry rough and strong; and towards the end of the hot weather water is scarce.

TIRLÁPUR.

Tirla'pur is a large village on the Hubli-Bijapar road, about six miles west of Navalgund, with in 1881 a population of 1559. Tirlapar has a travellers' bungalow and is one of the chief halting places for the cart traffic from Bijapur and the Nizam's territories. The village is badly off for water especially in the hot weather. Near the village is a large reservoir which was built before the beginning of British rule.

TRIMALROP.

Trimalkop, with in 1881 a population of 295, is a small village on the Poona-Harihar road about twelve miles south of Hubli. It is largely used as a halting place and has a travellers' bungalow.

TUMINKATTI.

Tuminkatti, on the Dharwar-Maisur frontier about fifteen miles south of Ranebennur, is a large village on the Tungbhadra, with in 1881 a population of 4622 of whom 4221 were Hindus, 397 Musalmans, and four Christians. Tuminkatti has a school and a weekly market on Wednesdays.

UKUND,

Ukund, a small village about five miles west of Ranebennur, with in 1881 a population of 780, has a temple of Kalleshvar with an Old Kanarese inscription slab (5'×2'6"). There is a copperplate grant in the possession of one Shankar Ningapa Bajar.

UNKAL.

Unkal, on the Poona-Harihar road, about three miles north of Hubli, is a large village with in 1881 a population of 2975. The village has an outstation of the Basel German Mission. There are three temples in the village all said to have been built by Jakhanáchárya. Two of them, Kalmeshvar's and Virbhadra's, are small and modern looking, but the third Chandramauleshvar's is a large black stone temple with sculptured walls and pillars. There are three inscriptions in the village two of them on the road leading to the ruined fort of Unkal.

VADENPUR.

Vadenpur, a small village about five miles north of Kod, with in 1881 a population of 330, has to the north an inscribed stone dated Monday the twelfth of the bright half of Kártik (October-November) 1500 (S. 1422 Dundubhi Samvatsar). The inscription records the grant of Maypur (?) to the Linguyats as an atonoment for the murder of a woman named Kapite by a man whose name appears to read Lingakunteyavadar Kenidsannadnayak.

VANHALLI.

Vanhalli, a small village about two miles north of Shiggaon, has a temple of Ishvar with an inscription.

VARAR.

Vara'h, ten miles south-west of Kod, with in 1881 a population of 558, has a temple of Kalleshvar with a hero-stone or virgal bearing an inscription dated 1288. In the land belonging to one Mallárappa Desái within the limits of this village is a sati stone or mástikal¹ dated 1446 (S. 1368).

YALIMEUR.

Yalisirur village, about thirteen miles south of Gadag, with in 1881 a population of 912, has a temple of Ishvar with three inscrip-

¹ Mástikal is an abbrevation of mahdeatikal or the stone of a great eati.

tions dated 1109, 1117, and 1144, and a temple of Hanuman near the village gate with an inscription dated 1115.

Yaungal, a large village about fifteen miles west of Ron, with in 1881 a population of 1709, was till 1862 the head-quarters of a petty division.

Yelival, a small village of 490 people, nine miles north of Hangal has a temple of Dyamava with an inscription dated 1404.

Yellur, a small village of 239 people, six miles north-east of Hángal, has a temple of Kallappa with near it on the bank of a pond an inscription, the date of which cannot be made out. The village has a second inscription dated 1248.

Yemnur, three miles south-west of Navalgund, with in 1881 a population of 850, is the scene of a large yearly fair in March-April attended by 20,000 to 100,000 people. The fair is held in honour of Raja Baghsavar a saint of Kulburga in the Nizam's territories. The story is that about 1690 shortly after the overthrow of the Bijápur Adilsháhi dynasty (1489-1687), therelived two famous saints, Khwaja Band Nawaz at Bijápur and Sháh Mira Abdul Rajak Kádri at Kulburga in the Nizam's country. Kadri worked many miracles and rode with a snakewhip on a scorpion-bridled tiger which gave him the name of the Tiger-riding king or Rája Bághsavár. Riding on his tiger Kádri once went to visit Khwaja the Bijapur saint. As he drew near, Khwaja's grandson, a miraculous boy of seven unwilling to be outdone by Kadri, jumped on an old wall and rode up on it to meet the tiger king. Humiliated by a power which could make a wall move Kadri returned to Kulburga without seeing Khwaja and died of grief. Khwaja cursed his grandson for causing the death of his saintly visitor and the boy too died. Since then the tiger-riding saint's fame has spread and various tombs have been raised in his honour. Betroji, a Marátha headman of Koregaon village in Sátára a great devotee of the saint, saw him in a dream. The saint asked him if he had any wish and Betroji prayed the saint to live near him and take care of him and his family. The saint told him that he would find impressions of the saint's hand or panjás lying near his pillow and that he was to take them to Yemnur and worship them there. On awaking Betroji found near his pillow two canes and a hand or panja riding on a silver tiger. He took them to Yemnur and began to worship them. About 1720 the present tomb a mud-walled whitewashed building with a wooden roof still standing was built by a descendant of Betroji. The present objects of worship are two hands or panjás on two small brass horses. The ministrants are descendants of Betroji who get about £120 (Rs. 1200) as offerings from the dovotces at the fair. The fair is held on the fifth of the dark half of Phálgun or March-April and lasts about four days. Of the twenty or twenty-five thousand Hindus and Musalmans who attend the fair only about 5000 are devotees, who come under yows to the saint to cure venereal disease. They come from various parts of the Dharwar district, from Belgaum, Bijapur, Kanara, and the Nizam's

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YAUNGAL.

YELIVAL.

YELLUR.

YEMNUR.

¹ Mr. C. Wiltshire, C. S. and Ráv Bahádur Tirmalráv Venkatesh.

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Places.
YEMNUR.

territories. Persons suffering from disease promise, if the saint cures them, to offer sheep and fowls and to feed Musalman beggars. They take medicine in the name of the saint and if cured come to Yemnur to fulfil the vows. On arriving the devotees bathe in the Benihalla which flows close by the town, smear their bodies with mud and swallow some incense burned before the sacred hands mixed with the water in which the sacred hands have been bathed. The promised sheep and fowls are slain by a Musalman who is paid 11d. (1 a.) a head. After being boiled and offered with a wheat cake to the saint, the animals are eaten by the payer of the vow if he is a flesh-eating Hindu. If he is not a flesh-eater he gives the animals to the Marátha ministrants or to the people. Sometimes brass and silver horses and hands are presented to the saint. These are kept near the original horses and hands and worshipped with them. The fair is a considerable centre of trade; about £2500 (Rs. 25,000) worth of goods are sold every year. About 200 booths are set up by Lingayat Marátha and Musalmán dealers. The articles sold are rice, pulse, sugar, sweetmeats, cooked food, country liquor, grapes, guavas, water and musk melons, plantains, flowers, matches, firewood, fodder, waistcloths, women's robes, jackets, small and large trousers, small carpets, thread, needles, combs, redpowder, perfumes, toothpowder, false pearls, and coral beads, copper brass and iron vessels, metal lamps, small boxes of tin brass and copper, toys, and bamboo baskets. The buyers are chiefly consumers, and all payments are in The people spend the four days of the fair in great merriment. Hindus buy sugar, flowers, and perfumes and if they have made a vow, offer them with animals to the saint, making a small money present to the ministrant. Musalmans offer cooked food and presents in money to the Marátha ministrant and to the Musalmán beggars, but abstain from animal sacrifices. When they have paid these vows, the people form in groups and go to hear dancing girls and singing and playing beggars, or go to see wrestlers, or buy and eat sweetmeats and fruit, or buy toys for children, or combs matches needles and thread for home use. A municipality, which is managed by the Navalgund commissioners and is maintained by a pilgrim and shop tax, has been opened since the 28th of January 1881.2 The pilgrim tax, which in 1882-83 yielded £241 (Rs. 2410) is levied at the rate of $1\frac{1}{2}d$. (1 a.) on each pilgrim. The shop tax, which yielded £32 (Rs. 320) is levied at 1s. to 2s. (Re. $\frac{1}{2}$ -1) on each shop or booth according to its size and amount of business, The charges amounted to £381 (Rs. 3810) most of which was spent in improving the water-supply.

Yerguppi.

Yerguppi, a small village on the Benihalla about twelve miles south-east of Hubli, has a temple of Náráyan, with a stone inscription.

¹ The details are thirty booths of sweetmeat-makers: twenty-five each of brass vessels, sugar, and grocery sellers, and twenty each of dealers in cloth iron pots plantains sugarcane and glassware. Mr. C. Wiltshire, C. S.

² Government Notification, General Department, 3413 of 12th October 1881.

Tar. State of Sa'vanur, consisting of twenty-five villages scattered through the Dhárwár sub-divisions of Bankápur and Karajgi, has an estimated area of seventy square miles, a population according to the 1881 census of 14,700, and, during the five years ending 1883, an average yearly revenue of £5660 (Rs. 56,600). Round the town of Savanur, which is about forty miles south-east of Dharwar, the state lands stretch about thirteen miles west and east, and about nine or ten miles north and south. Except in the west where are low scrub-covered hills, the country is flat and rather bare of trees. No river with a flow of water throughout the year passes through Savanur, but the Varda, on its way through Karajgi, touches the south-east boundary of the state. Several villages are provided with reservoirs and ponds, and on the supply of water stored in these during the rains, the people depend for the greater As the hot season advances the supply of part of the year. water in these ponds runs dry, and people have recourse to wells in neighbouring villages or to temporary wells sunk in the beds of small streams. Most of the state villages are provided with wells which are used both for drinking and for watering cattle. The climate is hot, but the rains are abundant though not excessive. The climate of the town of Savanur, which has a rainfall of about twenty-five inches, is considered better than that of Dharwar. Within Savanur limits there is only one forest at Mulakari. Before the British management of the state began this forest was much injured. Lately a good deal has been done in planting timber trees and the forest is now more thriving. Besides this specially reserved forest, tamarind, mango, nim, and babhul abound in all the villages. Road-side trees have lately been planted and are doing well. According to the ISSI census returns the population of the state was 14,768 of whom 10,901 were Hindus and 3859 were Musalmans. The soil of the northern, eastern and southern villages is both red and black, and that of the western villages is red. The crops are the same ng those grown in Dharwar. Cotton is the chief crop in black soil villages, and large quantities of cocoa and betel palms and botel vines In the town of Savanur moneylending are grown at Savanur. is carried on by Brahmans, Linguyats, and Raddis. The other Villagors in need of money villages have few moneylenders. horrow either from Savanur or Dharwar monoylenders. yearly rate of interest, when property is not pledged as security, varies from eighteen to twenty-four per cent. With a pledge of ornaments or other property the yearly rate is twelve to eighteen per cent. When husbandmen borrow they generally mortgage their land as accurity, or, in liquidation of the debt, promise to soll State.

State. Sávanur.

the creditor its produce at something less than the market rate. Formerly the Nawhb used to borrow money from lenders in the neighbouring Dharwar sub-divisions of Gadag, Bankapur, Karaigi, and Ranebonnur, and also from his own relations at a yearly rate of interest of twelve per cent. There is no mint at Savanur. The Imperial rupce is the only coin in circulation. Before the state came under Tipu (1785) there was a mint at which gold coins called Savanur Huns, bearing the name of the reigning Nawab and valued at 6s. 8d., were made. No silver was coincil at this mint. Prices and wages are the same as those in the neighbouring Dharwar towns and villages. The Savanur sher is equal to twenty tolas and the capacity sher is equal to about 170 tolus. Savanur is not a place of much trade. There is some trade in cotton and grain, but not on nearly so large a scale as in the towns of Hubli and Gadag in Dharwar. Cleaned cotton is the chief article of export to Kumta or Karwar. The leading articles of import are rice, oil, sugar, and other groceries. The only Savanur manufacture is the weaving of women's robes, cheap waistcloths, and other coarse cloth.

History,

The Savanur family is said to belong to the Meyauna tribe of Pathans.1 As far as is known from their family records, twenty generations passed between Abdul Karim Khan, the first Malik or head of their villages in Kabul, and Bahlole Khan, the founder of the family in the Deccan. Malik Awtan Khan, the fifteenth in the line, entered Hindustan in the train of Timur's army. Doda Khan the seventeenth in descent first changed the title of Malik for that of Nawab and rose in importance at the Imperial Court. Owing to the displeasure of the Emperor Jahangir (1605-1626), or perhaps to a difference with the nobles of the court, Bahlole Khan left Delhi and went to the Deccan, where he remained for some years with Khán Jahán Lodi the Moghal vicercy of the Decean. When Khán Jahan fell under Shah Jahan's displeasure and was harassed to death Bahlolo Khan entered Murtaza Nizam Shah's (1605-1630) service, but quitted it soon after on the murder of Murtaza in 1631 by his minister Fatch Khán. He then went to Bijápur where he was favourably received by Máhmud Adil Sháh (1626-1656). His son Abdul Rahim Bahlolo Khán seems to have done good service under Ali Adil Shah II. (1656-1672), and in 1660 was employed with Baji Ghorpade of Mudhol and afterwards with Khawas Khan to check the growing aggressions of Shivaji. Abdul Karim, also called Abdul Karim Bahlolo Khán, the next in the line was one of the most powerful

¹ Of the Pathans who are of Afghan origin Orme wrote in 1803: They are the best troops and the most dangerous enemies of the throne when in arms against it. From a consciousness of their superiority in arms, together with a reliance on the national connection which exists emong them, howsouver scattered into the services of different princes, they have acquired an insolence and audacity of manners which distinguishes them as much as the hardness of their features from every other race from the known ferocity of their temperit is thought dangerous to inflict punishment on them even when they deserve it, as a strong spirit of revenge has familiarised them with assassination which they seldom fail to employ whenever the smallness of their numbers disables them from taking vengeance by more open attacks. Ormo's History of the Military Transactions of the British Nation in Hindustan (Madraz. Roprint 1861), I. 6, 7, 55.

noblemen at the court of Bijapur. His marriage with the daughter of Masáud Khán, the estate-holder or jágirdár of Adoni, procured for him as his wife's dowry the fort and subdivision of Bagalkot in South Bijapur, and, what was of still greater value, the support of the Abyssinian party at the Bijapur court of which his father-in-law was the head. Abdul Karim commanded the Bijápur armies during several campaigns against the Maráthás, and on some occasions met with success. On the death of Ali Adil Shah II. in 1672 Abdul Karim Khán was appointed governor of the Bombay Karnátak, Sunda, and the Konkan, but the jealousy of the regent Khawas Khan prevented him taking the appointment. In his wars with Shivaji he suffered defeats and had to return to Bijapur in disgrace. Taking advantage of the unpopularity attaching to the regent Kháwas Khán owing to his alliance with the Moghals, Abdul Karim procured the regent's assassination and succeeded to the chief power in the state, which he held till his death in 1678. Under his guidance, the Moghals, who came to secure the surrender of Bijápur, were repulsed and had to make a treaty. He also quelled a disturbance in the Karnátak, and his eldest son Abdul Nabi Khán conquered some country further south, and became the Nawab of Kadappa about 240 miles south-east of Savanur. His surviving son Abdul Rauf Khan continued in Bijapur service, and, on the fall of Bijápur in 1686, he was sent to deliver the state seal to Aurangzeb. He then entered Aurangzeb's service receiving, with the command of 7000 horse, the title of Diláwar Khán Báhádur Diláwar Jang and an assignment of the twenty-two mahals or petty divisions of Bankapur, Torgal, and Azamnagar or Belgaum yielding a yearly revenue estimated at £240,000 (Rs. 24 lákhs).² At first he made Bankapur his head-quarters, but afterwards taking a fancy to the site of a small village named Janmaranhalli, he founded there the town of Savanur or Shravanur, as the place is still locally called perhaps because the removal took place during the Hindu month of Shrávan or August. Abdul Ráuf Khán was employed on several occasions under the Moghals. He aided in reducing Venkappa Náik the Berad chief of Vakenkeri now Shorápur in the Nizám's territories and was afterwards sent to subdue the refractory estate-holders or desáis of Kittur in Belgaum and Navalgund, Shirhatti, Hávanur, and Dambal in Dhárwár. In 1715 Abdul Rauf died leaving twelvo sons. The two eldest Abdul Fateh Khán and Abdul Muhammad Khán came to the throne one after the other each for six months. The third son Abdul Ghaffar Khán (1716-1721), acting under the orders of the Moghal Viceroy of the Deccan, was successfully resisted at one time by the desái of Shirhatti and at another was forced to yield the fort of Misrikota about twenty-seven miles north-west of Sávanur to the Maráthás under Rástia. Still he must have been generally successful as at his death in 1721 he left his successor

State. SAVANUR, History. 1672-1721.

¹ The quarter occupied by this family outside the city walls is still shown at Bijápur covered with ruins which are called Bahlolpur.

2 According to the Nawab's account Abdul Rauf Khan married Aurangzeb's daughter and received these districts in jdgir. According to other local accounts he received these districts valued at £17,500 (Rs. 1,75,000) for the support of 4000 learns. Part Cay 531 CVIII 2007 horse. Bom. Gov. Sel. CXIII, 207.

State. SAVANUA. History. 1721-1748. nearly the whole of the country between the Krishna and the Tungbhadra. The north-western portion of this tract belonged to the Marathas and is part of ancient Maharashtra where the Maratha

language is still spoken.

In 1721 Ghaffar died leaving three sons Abdul Majid Khan, Abdul Suttar Khan, and Karim Khan, the second of whom usurped the succession but was displaced and put to death by the other two brothers. Majid Khan then became the head of the family. He began by incurring the enmity of the Mogal Vicercy the Nizam by neglecting to apply to the Nizam for investiture on his succession. A Moghal force marched against Sayanur and Majid Khan had to yield. the wars (1720-1730) between Kolhapur and Satara Majid Khan sided with Kolhapur and added parts of south and east Belgaum to his Dharwar possessions. About 1730, as the deputy of the Nizam who in 1723 had thrown off his allegiance to the Emperor, he received Belgaum fort. He was also the master of Sunda in North Kanara and of Bednur beyond the Tungbhadra. Emboldened by these successes in 1746 Majid Khan ventured to resist single-handed the authority of the farmer of the Maratha dues from the country between the Krishna and the Tungbhadra. This brought on him a Marátha army under the Peshwa Báláji (1740-1761). In 1747 Majid Khan had to agree to a treaty by which he yielded the country comprised in the sub-divisions and old estate lands of Padshapur, Kittur, Parasgad, Gokák, and Yádvád in Belgaum; of Bágalkot and Badami in South Bijapur; of Navalgund, Dambal, Annigeri, and part of Ranebennur and Kod in Dharwar; of the state of Torgal; of Halival in North Kanara; of Haribar beyond the Tungbladra and others, thirty-six districts in all. He was allowed to keep Misrikota, Hubli, Bankapur, Hangal, the greater part of Kod and Rauebennur, and the district of Kundgol, in all twenty-two together with tho family forts of Bankapur, Torgal, and Belgaum or Azamnagar. It was also agreed that the Marithas should not molest Sunds and Bednur. Part of the country ceded by this treaty does not seem to have at once passed to the Maráthás.

In 1748 the great Nizam-ul-Mulk died and his second son Nasir Jang became the ruler of Haidarabad. Nasir Jang's claims were disputed by his nephew Muzasfar, a favourite grandson of Nizam-ul-Mulk, who allied himself with the French at Pondichery. To oppose his rival, Nasir Jang aided by a small body of English troops under Major afterwards Major-General Lawrence, the father of the Madras army, marched into the Karnátak. He was also accompanied by Majid Khan and his kinsmen the Pathan Nawabs of Kadappa and These three possessed the daring temper of their nation and had willingly taken the field with Nasir Jang because they made no doubt of obtaining in reward for their military service a remission of large sums they owed to the Moghal treasury as well as considerable immunities in their states. But Nasir Jang heeded not their claims and treated thom as vassals who had done no more than their duty in going to the Moghal standard. Disappointed in their hopes they grew weary of a bootless war. On the eve of the battle Muzaffar Jang was descried by his French allies, and, through the exertions of the three Nawabs, Muzaffar Jang gave himself up to his uncle on the

solemn assurance being given to the Nawabs that Muzaffar would not in any way be injured. Contrary to his promise Muzaffar was put in irons by Nasir Jang. Nasir Jang's faithlessness annoyed the three Nawabs, who from that day confederated and meditated mischief, but agreed to remain quiet until they could carry out their plans. They intrigued with the French general Dupleix who gained a Brahman named Ramdas in the confidence of Nasir Jang, and through him raised seditions in the army which Dupleix called into operation by an attack on the camp by a detachment commanded by M. De LaTouche. On the 5th of December 1750 Násir Jang was treacherously shot by the Nawab of Kadappa. Muzaffar was set free and the three Nawabs began to demand the rewards they expected for their share in his success. During his imprisonment Muzaffar had promised everything the Nawabs thought proper to ask, not intending to fulfil more than what the necessity of his affairs should oblige him to. The presence of the French troops made him care little for the Nawabs' resentment, and to the French alone he entrusted the guard of his person and the care of his treasures. Not to irritate the Nawabs by an absolute rejection of their claims, he told them that his engagements with the French would not allow him to determine anything without the advice and participation of Dupleix, and encouraged them to hope that everything would be settled to their satisfaction at Pondichery. On the 16th of December 1750 the Nawabs waited on Dupleix at Pondichery, and desired him to determine what rewards they should receive for the services they had rendered. They demanded that the arrears of tribute which they had not paid for three years should be remitted; that the countries which they governed, with several fresh territories, should be exempted from tribute to the Moghal government; and that one-half of the riches in Nasir Jang's treasury should be given to them. It was known that all the lords of Muzaffar's court waited to measure their demands by the concessions which Muzaffar should make to the three Nawabs; if these obtained all they asked, the whole of his dominion would scarcely suffice to satisfy the other claimants in the same proportion. On the other hand, if they were not satisfied it was much to be feared that they would revolt. Dupleix therefore postponed all other considerations to this important discussion, and conferred with the Nawabs for several days successively. He acknowledged Muzaffar's great obligations to them for their conduct in the revolution; but insisted that he himself had contributed as much to it as they, and was therefore entitled to as great rewards, and that if such concessions were extorted Muzaffar would no longer be able to maintain the dignity he had acquired. With the object of setting the example of moderation, in the last conference, Dupleix told the Nawabs that he would waive his own claims to any share of the treasures or to any other advantages which might distress the affairs of Muzaffar. Finding Dupleix determined to support the cause of Muzaffar the Nawabs agreed among themselves to appear satisfied with the terms he proposed. These were, that their government should be augmented by some districts much less than those they

State. Sivanue. History. 1750. State. Savanur. History. 1761. demanded; that their private revenues should be increased by the addition of some lands belonging to the crown given to them in farm at low rates; and that the half of the money found in Nasir Jang's treasury should be divided among them, but the jewels should be reserved to Muzaffar. This agreement was signed by the Nawabs who likewise took on the Karan an oath of allegiance to Muzaffar declaring at the same time that Nizam-ul-Mulk himself had never been able to obtain from them this mark of submission. Muzaffar on his part swore to protect them so long as they remained faithful.

On the 4th of January 1751 Muzaffar left Pondichery accompanied by a French detachment commanded by Bussy and consisting of 300 Europeans and 2000 sepoys with ten field pieces. The march was continued without break until the end of the month when they arrived in the territory of Kadappa about sixty leagues from Pondichery. There some straggling horsemen quarrelled with the people of a village and set fire not only to that but to two or three other neighbouring villages. The Nawab of Kadappa, pretending to be greatly annoyed by this outrage, ordered a body of his troops to revenge it by attacking the rear-guard of Muzaffar's division. A skirmish ensued, and the Kadappa troops, overpowered by numbers, retreated to their main body. Their attack, whether by chance or design is uncertain, had been directed against that part of the army which escorted the women; so that this defiance was heightened by the most flagrant affront that the dignity of an Indian prince could receive, for the persons of women of rank are deemed sacred even in war. Muzaffar no sooner heard of this insult than he ordered his whole army to halt, put himself at the head of a large body of troops, and prepared to march against the Nawab of Kadappa. Bussy, who had been instructed to avoid if possible all occasions of committing hostilities on the route to Golkonda, interposed, and, with much difficulty, prevailed on Muzaffar to suspend his resentment until the Nawab should explain the reasons of his conduct. Messengers were sent both from Muzaffar and Bussy. To Muzaffar's messengers the Nawab of Kadappa answered that he waited for their master sword in hand; but to Bussy he sent word that he was ready to make submission to Muzaffar through his mediation. The difference of these answers stung Muzaffar to the quick, and nothing could now stop him from proceeding to take instant revenge. He told Bussy, who still attempted to calm him, that every Pathan in his army was a traitor; and in a very few minutes the truth of his assertion was confirmed. For his spies brought news that the troops of all the three Nawabs were drawn up together in battle array; that they were posted to defend a defile which lay in the army's line of march, and several posts leading to the defile were defended by cannon which had been brought some days before. These preparations left no doubt that the rebellion of the Nawabs was premeditated, and indeed they had begun to concert it from the very hour that they had taken the oath of allegiance at Pondichery. Muzaffar, in full march at the head of his cavalry, grew impatient with the slow pace of the French battalion, and hurried on to attack

the rebels without their aid. The Nawabs had in their service many of their own countrymen, who, though much inferior in number, stood the shock with great intrepidity and had even repulsed Muzaffar's troops before Bussy came up. The fire of the French artillery, after severe slaughter, changed the fortune of the day and obliged the Nawabs to retreat. Then Muzaffar, irritated by the repulse he had sustained, rallied his troops and heedless of Bussy's remonstrances pursued the fugitives and left once more the French battalion behind, who endeavoured to keep in sight of him but in vain. They soon after came up to some of his troops who were cutting to pieces the body of Majid Khan the Nawab of Savanur which lay dead on the ground. The Nawab of Kadappa fled from the field desperately wounded, and in pursuing him Muzaffar came on the Nawab of Karnul, who, finding he could not escape, turned with the handful of troops that surrounded him and pushed on towards Muzaffar's elephant. Exasperated by this defiance Muzaffar made a sign to his troops to leave the Nawab to be attacked by himself. The two elephants were driven close to each other, and Muzaffar had his sword lifted to strike, when his antagonist drove the point of his javelin through his forchcad into the brain. He fell back dead. A thousand fire-arms were aimed at the Nawab, who in the same instant fell mortally The troops not satisfied with this atonement dashed with wounded. fury on the Nawab's body-guard and cut them to pieces. The French battalion was preparing to hail their return with acclamations of victory when the news of Muzaffar's fate struck them with the deepest consternation. They immediately marched back to the camp which they found in the utmost confusion. Large arrears of pay were due to the army, and it was to be feared that the soldiery would mutiny and plunder, and every general suspected the others of sinister intentions.1

Majid Khán was a man of considerable talents and his memory is still held in esteem in the southern districts. He founded the large and flourishing town of New Hubli, the chief division or peth of which is named after him Majid Peth. Majid Khan's son Abdul Hakim Khan had not long succeeded before he had to face a formidable confederation and to give up much of his possessions. He imprudently received into his service one Muzaffar Khán who had first been under the Nizám, and then under the Peshwa Balaji (1740-1761), and when the Peshwa demanded his surrender, Abdul Hakim refused to give him up. He had also declined to acknowledge the supremacy of Salabat Jang the third son of the great Nizám-ul-Mulk who had been raised to the throne of Haidarabad through the influence of Bussy. The two powers combined against Hakim Khán and an army under the Peshwa Báláji marched against Savanur, and was joined on the way by a force under Salabat Jang and Bussy with a splendid train of artillery. The Nawab was aided by Murarirav of Guti who had also thrown off his State. Sávanur. History. 1751-1756.

¹ Orme's History of Hindustan, I. 142, 143, 156, 158-160, 163-165; Malleson's History of the French in India, 251, 263 and 272-273; Briggs' Nizam, I, 56-57.

State. SÁVANDIL. History. 1750 - 1764. allegiance to the Peshwa. The besieging force was too strong for the Nawab, and, after a siege of three months during which the superiority of the European artillery was first displayed, the Nawab came to terms partly owing to the sense of his weakness and partly under the influence of Murariray. The French Company owned Muráriráy a large sum on account of his services in the Trichinopoly war (1740-1743) for which the government of Pondichery had passed a bond. He had often threatened mischief to their affairs whenever the opportunity offered if the money was not paid. Now, seeing the great force that was coming against him and the Nawab, he privately offered to give up his claim upon the French Company if Bussi would effect his reconciliation with the Peshwa on moderate terms, A negotiation entirely conducted by Bussy ensued, the result of which was that Bakim Khan and Murarirav made their submission to their superiors and Muráriráv gave to Bussy the bond of the French Company. This device of Bussy's came to the notice of Salábat Jang who, influenced by the Peshwa Bálájí, not only dismissed him from his service but took measures for his destruction.2 Under the terms of the treaty the Nawab Hakim Khan gave up to the Peshwa the districts of Misrikota, Rubli including the new peth or town, and Kundgol yielding a yearly revenue of £82,393 (Rs. 8,23,930). To compensate the Nawab the Gutal division of Ranebennur and Parasgad with the district of Annigeri were added to Savanur mising his total revenue to £77,864 (Rs. 7,78,610) including Sunda in North Kanara. The Nawab was obliged in addition to pay £110,000 (Rs. 11,00,000) in money for the balance of which Bankapur fort was made over to Holkar in pledge. On the other hand the Peshwa engaged to protect the Nawab from all interference on the part of the Nizam.

Haidar Ali, who in 1763 had usurped the Maisur throne, within a short time enlarged his northern frontier. The province of Savanur ran far south into Haidar's territory and Haidar formed the design of gaining the Savanur Nawab to his interest. Besides the Savanur Nawab he was anxions to gain the Nawabs of Karnul and Kadappa with the view of establishing a defensive cordon along his northern frontier and gaining three corps of hardy Pathan cavalry to serve with his armies. Abdul Hakim Khan, the Savannr Nawab, rejected Haidar's overtures, and in 1764, a large Maisur army under Haidar and his general Fazi Ulla Khán appeared before Sávanur. The situation of the Nawab rendered it equally unnecessary and

¹ Grant Duff's Maráthás, 292-293.

² Orme's History of Hindustán, I. 427. While describing these operations Orme (Ditto, 426) writes of Sávanur. The city of Sávanur or Sánere lich about 200 miles south-west of Golkonda and about thirty north-west of Bisnagar. It is extensive and well peopled, situated in a great plain and surrounded by a wall with round bastions and towers. On a rock about a mile and a half from the city is a very strong fortress called Bankápur whence the capital is generally called by the twin in these countries, which is likewise called Sánere. Orme's details are incorrect. The situation of Sávanur with respect to Bisnagar is more than double the distance and is in nearly the opposite direction to that given by Orme; and the city is never called Sávanur Bankápur; though Bankápur is sometimes so called to distinguish it from a place of nearly the same name. Moor's Narrative, 246.

impracticable for him to maintain a large body of troops. Rather for the credit of not shutting himself up in the town without an effort than with any reasonable hope of success against Haidar's overwhelming force, the Nawab moved out with 3000 to 4000 horse and a rabble of irregular foot. The foot were spread over the plain so as to make a show of greater numbers, and the Pathan horse were reserved in a compact body to take advantage of any opportunity that might offer. Haidar, holding this demonstration in contempt, made a disposition which was intended to envelope the whole and to cut off their retreat. Abdul Hakim charged the principal column when in the act of deploying, cut through it with considerable slaughter, and with great coolness and judgment prepared to overset the infantry, already formed in line, by a charge of their flank. At this moment a reserve of artillery opened with effect on this close and compact body of cavalry, and produced a degree of confusion which compelled the Pathans to disperse and Haidar seized with promptitude this favourable moment for a charge with his own cavalry; the fugitives were pursued to the very gates of the city, and a small remnant only of the infantry, who stripped and passed as peasants, escaped the sabre on the plain. The immediate consequence of this gallant but imprudent effort was the unconditional submission of Abdul Hakim to all the demands which Haidar had previously made, and to a further military contribution of £20,000 (Rs. 2 lakks). Hoarding treasure is not among the propensities of a Pathan, nor among the practices which escape the observation of a Marátha, and, as the Nawab had unfortunately little credit with the moneylenders, he was obliged to make payment in shawls, silks, muslins, gold cloths, carpets and other valuables, equal according to Haidar's estimation to the stipulated sum but actually worth four times that amount.1 The deteat of the Nawab enabled Haidar to occupy the Maratha country as far north as the left bank of the Krishna. A Maratha army under the Peshwa Madbayray (1762-1773) marched against Haidar, drove him beyond the Tungbhadra, and, in 1765 forced him to come to terms under which Haidar agreed to give up all claims on Sávanur. 1776, taking advantage of the confusion at Poona which followed the death of the Peshwa Madhavrav in 1773 and of the murder of the young Peshwa Náráyanráv in the same year (1773), and under a secret agreement with Raghunáthráv, Haidar again crossed the Tungbhadra and possessed himself of about one-half of Sávanur. Before his campaign was over the monsoon burst with great violence and caused such destruction among his horses and cattle that Haidar was forced to seek shelter. The Poona ministers opposed to Raghunáthráv sent troops to drive Haidar across the Tongbhadra. attempt failed and by 1778 Haidar was master of the whole country south of the Krishna. In 1779, to strengthen his hold on the country, Haidar opened an alliance with Abdul Hakim Khan by giving his daughter to Abdul Hakim's eldest son Abdul Kheir Khan, and taking Abdul Hakim's daughter for his second son Karim Shah.

State. SAVANOR. History. 1764-1779. State. Sivanur. History, 1779-1702.

On the occasion of this double alliance Abdul Hakim and his whole family visited Seringapatam. Haidar came out to meet them as a token of respect; and the marriages were celebrated with great splendour. The half of Savanur which in 1756 the Marathas had left in his possession was restored to the Nawab on the promise of paying a yearly tribute of £40,000 (Rs. 4,00,000); and as much of the remaining half as was under the Marathas but was now under Haidar was also restored on condition of keeping in service 2000 choice Pathán horse to be commanded by two of the Nawab's sons. Till Haidar's death in 1782 Abdul Hakim prospered. Haidar's son Tipu, out of personal enmity to Abdul Hakim, took offence at his neglect in not sending messages of condolence, and demanded a large sum on the ground that the contingent had not been properly maintained. This greatly annoyed the Nawab who allied himself with the Maráthás. In 1786 when the Maráthás began to recover their footing in the Bombay Karnatak, Tipu made a demand of £280,000 (Rs. 28,00,000) from the Nawab in lieu of his contingent, and sent Rághvendra Náik his chief banker to receive it. Tukoji Holkar was at this time besieging Kittur then belonging to Tipu. The Nawab sent to him for aid. He marched in one night to Savanur in the hope of surprising the banker but only secured some of his followers from whom he exacted £20,000 (Rs. 2,00,000). Tipu, hearing of this movement, proceeded from Seringapetam, crossed the Tungbhadra, and advanced against Savanur. Haripant, the commander of the Marátha army in the Deccan, joined the Nawab's and Holkar's armies at Sávanur. Both armies met in the plain of Sávanur and in the war which followed Sávanur suffered severely. The prospect of an English-Marátha alliance led Tipu to ask for terms. An armistice took place on the 1st of February 1787, and peace was concluded in April. The Nawab was restored to that portion of his territory which he held before his son's marriage with Haidar's daughter. But dreading Tipu's treachery the Nawab die not venture to remain at Savanur and went to Poona, where he subsisted on a monthly pension of £1000 (Rs. 10,000) allowed him by the Marathas.

In the Third Maisur War (1790-1792) after Dhárwár was cleared of Tipu's troops Hakim Khán lived at Sávanur. At the end of the war in 1792 on their return from Seringapatam a party of Europeans of Captain Little's Detachment halted at Sávanur. Word was sent to the Nawáb telling him of their arrival and their desire to pay him their personal respects. A painful attack of illness prevented the Nawáb from showing his respect to the party and to the Firangis in general by himself attending and conducting them to the palace. On an appointed day the party went to the Nawáb's residence. At the door they were received by the head physician and the courtiers who detained them for a quarter of an bour in talk about the war. Several of the Nawáb's children, who were remarkably fine boys, were brought from their Persian and Arabic tutors to be introduced to the 'Firangis.' Several chambers had

¹ Wilkes' South of India, II. 207.

State.
SAVANUR.
History.
1792.

to be passed before coming to the gardens in which was the Nawab's residence. It was at the end of an enclosed piece of ground disposed in flower beds, with a handsome piece of water and fountain in the centre, round which the party had to pass as it were in review before the Nawab, who, with a favourite son about seven years old, was sitting under an arch of the room on a seat raised about a foot from the ground. Being very hot (May) he was thinly clad and had on a small cap usually worn under a turban. was old and wonderfully fat, vain, and talkative. The visitors were very graciously received and seated on carpets with their hats on their heads. They were detained about half an hour during which he made many inquiries about the war, how it was ended, and what likelihood there was of his being restored to his former position. The party responded to the Nawab's inquiries except on the last point for which for political reasons they confessed their ignorance. He appeared satisfied with this and expressed himself mightily pleased at hearing how Tipn was subdued and humbled. Turning to his attendants. as he often did particularly when relating any story in which his own exploits in hunting were displayed, he said None but the Firangis could have done this,' and pointed to the favourite son near him to observe the party. When speaking of Tipu he could not help showing his hatred of him. If he dared he would have shown equal dissatisfaction at the Maratha's whose parsimony had sadly curtailed his splendour and dignity. Although no language but Hindyi or Moors was spoken he was doubtless skilled in the learned and polite languages. He had the reputation of being a very well informed man, and, from what the visitors could learn, as good as it is usual for so great a man to be. He made several kind inquiries after the wounds of some of his visitors, how and where they received them, and appeared concerned when he understood there was no likelihood of their recovering the use of their limbs. His hubble-bubble, his constant companion, appeared to be of English glass curiously cut. There were several other pieces of European glass. He never drank any thing but water of the Ganges, that is the Godávari, not for its holiness but for its medicinal properties, all other water disagreed with him. He had several camels and abdars always employed in bringing water from that river. At the end of the visit the guests were perfumed with essences and presented with botel leaves. He pressed them to make a longer stay at Savanur, but the approach of the rains prevented them. His many wives stayed in the gardens to the north of the city where he went in the evening. He was blessed with fine children of which he had at least six, the eldest not more than ten years old. He seemed very fond of them and they were his chief happiness, as he was too wise to be much gratified with the empty praise that courtiers paid to what, he was but too conscious, was the pageant of royalty. Exclusive of his harem his chief show and expense was in his tents and sports. On his former hawking and hunting parties fow sovereigns in India made more magnificent display. He foully dwelt on his old exploits at these exercises from which he was debarred by ago and fatness. He keenly felt the difference between his present fallen condition and his former elevation, when, as he boasted, he had been known to challenge the sovereign of Maisur

State. Sávanur. History. 1792-1803. even to a strife of arms. He was a man of vast dignity. When at Poons, imagining coremonious compliments were not properly paid, he was very severe upon the Poons minister Nána Phadnavis himself, and that too at a time when he was expecting favour from, and indeed dependent on, that court. Enclosed by a wall and a ditch of no strength the town of Sávanur was neither large nor well built. Except the palaces which were chiefly in ruins, there were few elegant buildings. There were no fortifications of consequence. Outside to the north and east of the city wall were several long streets of houses mostly empty. To the south between the city and the gardens, which had the ruins of a handsome palace and elegant wells ponds and fountains, was a reservoir.

In 1795 Abdul Hakim died, and, as his eldest son Abdul Kheir Khan lived withhis brother-in-law Tipu at Seringapatam, the Peshwa recognized his second son Husain Mia and gave him in jagir the town and district of Savanur yielding a yearly revenue of £4800 (Rs. 48.000). For some years Husain Mis never enjoyed the revenue of these districts and still lived on the pension formerly granted to his father. Backed by Tipu Abdul Kheir Khan returned to Savanur from Seringapatam and claimed Savanur as his birth-right. Mia resisted his claims and Abdul Kheir Khan went to Poona and got from Nána Phadnavis a decision in his favour as eldest son of Hakim Khán. Nána gave him a grant to take possession of Sávanur and ordered Dhondu Pant Gokhale the Peshwa's sarsubhedár or governor of the Bombay Karnátak to enforce obedience. Though recognized by the Peshwa Abdul Kheir Khan, like his brother, did not enjoy the revenue of his estate owing to the quarrels of estateholders in the neighbourhood. He still lived on the monthly pension granted to his father and even this was irregularly and seldom paid. In 1800 the Savanur country was the scene of the Marátha freebooter Dhundhia Vagh's outrages of which details are given in the Dhárwár History Chapter. When General Wellesley marched in pursuit of Dhundhia Vagh Abdul Kheir Khan placed himself under the protection of the British army. After Dhundhia's death General Wellesley made an arrangement to secure to Kheir Khan the receipt of the revenues of his estate. But the disturbed state of the country not only defeated General Wellesley's arrangements but forced Kheir Khan to retire to Sunda where he began to raise troops. Being prevented from completing his levies by General Wellesley he returned to Savanur where he lived with his family in a miserable condition.2 In 1803 when General Wellesley marched to Poons through Dhárwár, Khoir Khán was in a state of extreme misery. He represented his case to General Wellesley and pressed him to oblige Bapu Gokhale the Peshwa's sarsubhedar to pay him part of the arrears of his pension to prevent him and his family dying from sheer starvation. Bapu Gokhale's distress and difficulty, at a time when he was aiding General Wellesley with troops, prevented General Wellesley from pressing Kheir Khan's demands on Gokhale and therefore a present of £500 (Rs. 5000) was made to Kheir Khan by

¹ Moor's Narrative, 246.250. 2 Transactions in the Marátha Empire (1802),83.

State. Sávanur. History. 1867-1884. Abdul Dullol Khun impressed in the most favourable manner all who were brought into contact with him, and received several gratifying tokens of the confidence of Government. In 1857 he was invested with full criminal jurisdiction, including the power of life and death, and three years after he received full civil juri-diction. Government reserving the right of cancelling these powers in the event of justice not being administered impartially. In January 1862 he was appointed a member of the Bombay Legislative Council. His administration appears to have been on the whole satisfactors. Among other improvements he caused a field survey of his villages to be made, which however was found afterwards to be too imperfect to form a basis for assessment. In August, 1862 Abdul Dullel Khan died at the age of about fifty-five and was succeeded by his eldest surviving son Abdul. Kheir Khau, who, after a career of extravagance that materially involved the estate, died of the effects of dissipation on the 11th of May 1868. His son Abdul Dulel Khan, a boy not quite six years old, was installed as his successor, and was placed under the guardianship of his grandfather Muhammad Ghous Khan, and was brought to Dharwar to be educated. In 1878 he was sent to the Rajkumar College at Raikot. He remained at Raikot till 1880 when he was removed to the Rajaram College at Kolhapur where he remained till 1882. Till 1883 when he was given charge, the state was managed by a diván acting under the direct superintendence of the Collector and Political Agent at Dhárwár. The Nawab died in August 1884.

Administration.

In 1882-83 of the total area of 44,660 acres 31,428 acres were occupied, 8026 acres were unoccupied atable, and 4606 were unarable. Of the occupied area 15,919 were state and 15,509 were alienated or inim lands. Before 1869-70 the system of farming villages to the Nawab's relatives and creditors while tending to a heavy reduction in the state revenue enhanced the landholders' burdens. In 1869-70, at a cost of £1019 (Rs. 10,490), the survey settlement was introduced in the twenty-five villages of the state. The acre rates of assessment vary from 6s. to £2 Ss. (Rs. 3-24) on garden land, from 6s. 9d. to Ss. 9d. (Rs. 32-45) on dry crop land, and from 2s. 3d. to £1 4s. (Rs. 15-12) on rice land. The state share of the revenue is collected by village officers, the headman and the accountant, under the control of the dixin or minister.

Sávanur was rather a grant in lieu of pension than an independent state and therefore the British Government, on its accession to the sovereignty of the Bombay Karnátak in 1818, exercised complete jurisdiction over Sávanur and placed the police administration under a head constable subordinate to the district officer at Bankápur. In 1832 a deed or sanad was issued to the Nawáb Manawar Khán granting him civil powers under Act XIII. of 1830. In criminal matters the Nawáb had full powers with the exception of capital punishment which sentence the Polital Agent had alone power to award. In 1857 the Nawáb was invested with full criminal powers including life and death. The Bombay Government reserved to itself the right of appeal in civil cases, but, in 1860, in consequence of the special confidence reposed in Abdul Dullel Kháu,

Government invested the Nawab with full civil jurisdiction in his Before the British management (1868) there were two civil courts, one a sailar amin's court and the other a sadar court. Cases up to £1000 (Rs. 10,000) were disposed of by the sadar amin, and appeals against his decisions were made to the sadar court over which the Nawab presided. No appeals used to lie to the Political Agent Dharwar but he had the right to review the Nawab's decisions. In criminal matters there were three courts, the sadar court presided over by the Nawab, a first class magistrate's court, and a second class magistrate's court. At present (1893) the minister or divin exercises the criminal powers of a district magistrate, and one of the young Nawab's cousins is invested with the powers of a second class magistrate. Criminal cases which are not punishable by a district magistrate are committed to the Collector and Political Agent who reviews their decisions and hears appeals against the decisions of the diran and the second class magistrate. In civil matters the Collector and Political Agent is now the appellate authority and has the powers of a district judge; and the diván has the powers of a first class subordinate judge. Against the decision of the Collector and Political Agent both in criminal and civil matters appeals lie to Government. The laws and regulations of the British districts have been introduced into the state, and the procedure of the courts is regulated by the provisions of these enactments. In 1883 of thirty-one offences sixteen were tried by the divan and fifteen by the second class magistrate. Fifty-one civil cases were decided by the divan. There is also a registration office which registered sixty-eight documents.

Before the British management there was no regularly organized police. He retained a few men armed with muskets and dressed na soldiers. The pay both of the officers and the men was small, and they were employed as messengers and letter carriers rather than as constables. In 1882-83 the police force was thirty-eight strong, together with eighteen hereditary police patils who rerve in person besides five deputies of hereditary patils and two stipendiary patils. The hereditary patils have rent-free lands as remuneration for their service. In 1882-83, including cash, the revenue of the state was £7773 (Rs. 77,730) of which £4380 (Rs. 43,800) or fifty-six per cent were from land. Except on account of certain lands in the state which were leased to the Nawab in 1861 on a fixed yearly rental of £48 (Rs. 480), the British Government possesses no share in the state revenue, The state levies no customs or transit duties. proceeds of the land tax a local fund cess of one anna in the rupeo of land rovenuo is lovied from all landholders for works of public utility and general comfort. Savanur is a municipal town, with in 1882-83 a revenue of £291 (Rs. 2910) and an expenditure of £191 (Rs. 1910). It has a Government post office which is under the charge of the inspector of post offices of the Kanara division. From Savanur a runner carries the post to Bankápur in Dhárwár. In 1882-83 Sávanur had three schools, a second grade anglo-vernacular school with an average attendance

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State-SAVANUR. Places, of 112, a Kánarese branch school with an average attendance of thirty-two, and a girls' school with an average attendance of thirty. The prevailing diseases are fever, cholera, small-pox, and guineaworm. There is a vaccinator who in 1882-83 performed 551 operations.

Savanur, with in 1881 a population of 7648, is the head-quarters of the Savanur state forty miles south-east of Dharwar. The town is nearly round and covers an area of three quarters of a square mile. It is enclosed by a ditch and has eight gates three of Beginning, from the north and passing which are ruined. east, the gates in repair are the Aghadi in the north, the Lakshmeshvar in the east, the Hurlikop in the south, and the Bankápur in the west; the three ruined gates are the Delhi. Gudi, and Hallipatti. The chief objects of interest in the town are: the Nawab's palace, nine mosques, a Vaishnav religious house or math, and some old ponds and wells. All of the nine mosques are in fair repair. The chief are Kamalballgadi and Khadarbag with the tombs of the Savanur Nawabs. Outside of the town to the north is a small prayer place where the Nawab goes in state twice a year on Ramzan and on the Bakar Id. The Vaishnav math of Satyabodhsvámi to the south of the town is a large building in good repair. A yearly fair in honour of the pontiff or svāmi, attended by a large number of his Vaishnav followers, is held at the Holi time in March or April. the south-west of the town is a large fruit and vegetable garden watered by a large pond called Moti Taláv or the Pearl Pond. The garden has many beautiful wells all of which except two called Sadáshivbhávi and Vishnu Tirth are in ruins. The Vishnu Tirth is held in great veneration by Brahmans. Near the Vishnu Tirth is a Hindu temple in good repair built entirely of ashlar stone. To the west of the town near the Bankapur gate is a large and beautiful but ruinous well called Alli Khánbávdi after Alli Khán a minister of one of the Sávanur Nawabs. Outside the town is a newly built bungalow surrounded by a garden and especially intended for English visitors. Between 1868 and 1876 the town was greatly improved by Mr. E. P. Robertson, C. S. then Collector and Political Agent of Dhárwar who had the roads metalled and widened and many old wells and ponds repaired.

APPENDIX A.

The following account of the village goddesses Durgava and Dayamava and their three-yearly fair is contributed by Ráo Bahádur Tirmalráo Venkatesh, pensioned Small Causo Court Judge, Dhárwár:

Appendix A.
Village.
Goddesses.

Durgava and Dayamava are the most widely worshipped deities in the Bombay Karnatak. Durgava is believed to be an incarnation of Parvati the hill-born the wife of Shiv, and Dayamava an incarnation of Lakshmi or wealth the wife of Vishnu. Durgava, in Dharwar, is believed to preside over and cause cholera, and Dayannava to preside over and cause small-pox. The name of Durgava or Durga Devi appears in the Hindu Purans and the is known and worshipped in all parts of the Bombay Presidency. Dayamava is not mentioned in any of the Purans and she is little known or worshipped in any part of the Bombay Presidency, except in the Bombay Karnatak. According to the local story Dayamava was the daughter of a learned Brahman. A sweeper of the Holaya or Mhar casto fell in love with her, and seduced her in the guise of a Brahman. Dayamava, not knowing that her reducer was a Holaya, married him, and had several children by him. Dayamava once asked her husband to call his mother to his house that the might get to know her. Matangi the mother-in-law came to dine. The dinner was perfect and was passing pleasantly when Matangi said to her son, How these sweet cakes taste like to a roasted buffalo tongue? Dayamava was horrorstruck. She made inquiries and finding that her husband was a Holaya not a Brahman, she set fire to Matangi's house, killed all the children she had by the Holaya, and tried to kill her Holaya husband. He fled and hid in a buffalo. Dayamava found him out and killed both him and the buffalo.

The temples of Durgava and Dayamava are small buildings of brick and mud and are generally near the houses of the Badiges or village corporaters. Except in some old shrines where they are of stone the innges are generally of wood. They are of the form and size of a Hindu woman with twelve hands. The six right hands hold the chakra or discus, the triskel or trident, a drawn sword, a spear, a dagger, and a long knife, and the six left hands hold a shankh or conch shell, a snake, a crooked dagger, a scabbard, a short knife, and a vessel either to hold blood or red lunks powder. The images are put together out of several pieces not carved out of a single block of wood. The two images are always set side by side, Durgava painted green and Dayamava printed red. The images are decked with ornaments like those worn by high and middle class Hindu women except that the nosering is the pinlike peasant woman's nose ornament not the upper class pearl ring. They are dressed in women's robes, but without bodices the sleeves of which are painted on their arms. The Badiges or carpenters are the hereditary ministrants or mijaris of these goddesses. Morning and ovening they lay before them flowers and redpowder, light a lamp, burn incense, wave the incense pot round their faces, and offer them cooked food or fruit. When a visitor comes to the temple he rings a bell, falls before the goddesses, receives a pinch of incense-ashes from the ministrant, and goes home. The Appendix A.
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GODDESSES.

more pious break eccoanuts, offer cooked food or dry provisions and money, wave a lighted lamp round the goddesses' faces, and beat their own checks in token of atonement for sin.

Once every third or fourth year, in the month of Vaishakh or May, or in any other month appointed by the committee, a special festival is held in honour of the goddess Dayamava called the Dayamaran játre or Dayamava's fair. Though Durgava's name is not mentioned during the fair the image of Durgava is carried side by side with that of Dayamava and is treated with equal respect. When the people of a village agree to hold Dayamava's fair the leading men of the village the desdi, deshpande, patil, and kulkarni, the potter, the money-counter, the talvar or watchman, the village carpenter, the blacksmith, the shoemaker, the Holaya or Mhár, the Mádigár or tanner, the potter, the barber, the washerman, the mathpati or Lingayat beadle, the joshi or astrologer, the bhat or bard, the tailor, the leading landholders, Lingayat priests, Brahmans, and shopkeepers all go in a body with music on New Year's Day in the month of Chaitra or April to the temple of Dayamava and Durgava and there tell the people that Dayamava's fair will take place in two or three months. They worship with flower and redpowder a hatchet which is to be used in felling timber for the idol car and send men with the hatchet into the forest to fetch timber. Some of the leading villagers form a nanch or committee to gather subscriptions to meet the expenses of the fair. Every husbandman, for every twelve acres of land, is required to pay 8s. (Rs. 4) in cash and 161 lbs. of Indian millet worth about 4s. (Rs. 2). The deshi, deshpande, and other village officers each pays 10s. to £2 10s. (Rs. 5 - 25) according to his means. The committee get a large copper pitcher and close its mouth with leather leaving a small slit to drop money through. The pitcher is marked with turmeric and redpowder and is called dabbi or the subscription-pot. One of the committee takes the pot from house to house and tells the villagers to drop in their contribution warning them if they do not pay, Dayamava and Durgava are likely to visit them with small-pox In a large town like Dharwar the subscriptions amount to and cholera. about £100 (Rs. 1000); in yillages they vary from £10 (Rs. 100) to £50 When the subscriptions are gathered the images are fresh (Rs, 500). painted, except the eyes which must not be painted till the first day of the fair. A twelve feet high wooden car is raised on four huge wheels, and on the car a shed, about twelve feet long twelve feet broad and twelve feet high, is built for the goddesses to sit in during the fair. Above the shed is a wooden pyramid with an ornamented dome and on the dome is fixed an open umbrella. One end of each of two or three strong ropes, each about two inches thick and a hundred yards long, is tied to the middle of the axles of the wheels. The other ends are left on the public road in front of the car that people may take hold of them and draw the car through the chief streets on the great day of the fair. The car is ornamented with coloured cloths, flags, plantain trees, fruit, flowers, and mango leaves, and generally one or two naked human figures are carved to keep off the evil eye. A large shed is built outside of the town, and, on one side of it, is a raised seat for the goddesses to sit on during the fair. Notice is sent through the village by beat of drum that all houses should be cleaned, cowdunged, and whitewashed, and that the streets should be kept clean for the fair. The townspeople send to friends and kinspeople within a day's journey to come to the fair. As the time draws near people from the neighbouring villages begin to pour in. Shopkeepers raise booths on the road sides from Dayamava's temple to the shed outside of the town, and athletes, songsters, jugglers, and dancing and singing girls begin to troop in. When the village is cleaned and the houses are cowdunged and whitewashed, nine

or ten days beforehand, a second notice is sent by beat of drum that the fair is to begin on Tuesday the tenth or whatever the date may be, that it will last for a fortnight, and that all the people of the village should prepure themselves for it. A lamp is lighted in the temple and kept burning for eight nights and eight days. This lamp burning is called ankthakona or the beginning of the fair. As, during the fifteen days of the fair no corn may be pounded or ground, people grind millet and pound rice enough for their use during the fair, and as, except boiling rice and seasoning vegetables nothing else is to be cooked during the fair, people take care to prepare various cakes and other sweetmeats enough to last for a fortnight. At the close of every fair of Dayamava a fine he-buffalo is bought. His brow is rubbed with turmeric and redpowder, nim leaves are tied to his neck, and sandal paste and flowers are laid on him. He is set free and called patialalana or the hely buffalo. He reams about the village streets and goes into the fields and feeds on anything he may find, no one doing him harm or hindrance. Some childless or sick persons vow to the goddess that if they have a child, or if their sickness is cured, they will set free a buffalo in the goddes,' name. If their prayers are answered they set a Such buffaloes are called harkikona or vow buffaloes. Besides the holy buffalo and the vow buffaloes the fair committee buy eight or ten he-buffaloes and about a hundred sheep. These buffaloes especially the holy buildo and the you bullaloes, whose free roaming life has made them wild, are generally very troublesome. To quiet them they are tied to posts and starved for three or four days before the great day of the fair and are further weakened by being made to drink strong lime-water.

On Tue-day the eighth day from the ankihakona or lamp-lighting ten carpenter women whose husbands are alive are fed in the chief Allage carpenter's house, and ten Lingayat women whose husbands are alive are fed in the house of the meti or chief village landholder. Early on Wednesday morning, the record day, Hindu men and women of all castes bathe, dress in their best, go to the goddesses' temple, and stand filling all the approaches. About eight the village painter paints the goddesses' eyes and besides his regular wages is given a sheep. The desdi hands the natil two gold avengulantras or lucky neck-threads and the patil ties one of them round Dayamava's and the other round Durgava's neck. The deshpande liquids the Lullarni two gold nose ornaments called mugtes one of which he puts on Dayamava's and the other on Durgava's nose. Next the desái. deshplade, patil, and kulkarni are given betelnuts and leaves as presents from the goddesses. After this the pujuris or ministrants, that is the carpenters who made the images, lay flowers and redpowder on them, dress them in fine clothes, deck them with ornaments, burn incense before them, wave lighted camphor round their faces, and bring them out of the temple. As soon as the goddesees are brought out a man of the Madigar or Tanner caste called the Ranigia, who is supposed to represent the brother of Daya praya's husband, comes forward and raising his right hand, in which he holds a stick with a bell and a handkerchief fastened to it, in front of the goddess shouts out before her the names of the private parts, and continues to shout until the car is drawn out of the village as far as the shed and the goddesses are placed on the raised seat built for them in it, Several cocounits are broken and two sheep are killed in front of the goddeves. The slaughtered sheep are carried round to the houses of all the leading villagers as an honour and are then brought back and kept near the car. A third sheep is killed and the images are set on the car. The village officers and other leading men stand before the goddesses with folded hands while the people offer coconnuts, plantains, dates, and other fruit. The offerings are taken charge of by the carpenter ministralits and Appendix A.
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Appendix A.
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their assistants who stand on the car by the side of the goddesses. Inconse is burnt before the goddesses and lighted camphor and lamps are several times waved round their faces. About cleven in the morning with the leave of the fair committee the ministrant allows the car-dragging to begin. About five hundred persons take hold of the ropes tied to the axle of the car, two sheep are killed, and amid shouts and yells the car is slowly dragged along. As it passes people pray to the goddesses to guard them from cholero and small-pox. Every time some roughness on the road stops the car the goddesses are supposed to be dissatisfied, and a sheep or two are slaughtered. At every turn and corner of the public streets through which the car is drawn a sheep is killed. As the car moves on carpenters masons and blacksmiths walk with it to clear the road. If any of them thinks that the goddesses are displeased he calls to the committee who order a sheep or two to be slaughtered. In this way the car reaches the shed outside of the village. On reaching the shed the goddesses are taken down from the car. Two sheep are killed and the goddesses are placed on the seats prepared for them and flowers and redpowder are laid on them. The laps of the goddesses are filled with rice, betchuts and leaves, plantains, and a cocoanut. When the lap-filling is over the people shout in praise of the goddesses. In the evening women of the Ashdi caste, a subdivision of the Madigars or Mangs, dress in fantastic clothes and dance before the goddesses singing their praises and telling their great deeds. The Asidi men beat drums and play music behind the women, while the Ranigia continues to shout filthy words chiefly the names of the private parts. In front of the shed a piece of ground, about ten feet long and ten broad, is cowdunged and ornamented with figures drawn with different coloured powders. On the spot so decorated, about four o'clock on the Thursday morning, is brought the pattadakona or holy buffalo, who is supposed Five or six Mádigárs or to represent Dayamava's Mhar husband.1 Tanners throw the buffalo on the ground and hold him down, some by the legs and some by the horns and face. A Madigar comes with a long sharp knife and cuts the buffalo's throat while another holds an earthen vessel to catch the blood. Next the vow buffalces and one or two specially bought buffaloes are led before the idol. The head of each is cut from the body by repeated blows with hatchets or sickles. When this is over one of the legs of the holy buffalo is broken and put in its mouth and the head is carried to a small grass but called Matangi's gudsala or cottage and laid in it. Several earthen lamps are lighted and one of them is set on the head of each of the buffaloes. A large quantity of rice is boiled and set on one side and the body of the holy buffalo is out in pieces. The front right shoulder is the perquisite of the Ranigia and is handed to him and the other parts are distributed among the village officers according to the village custom. The village officers do not take these parts but make them over to the Holayas and Madigars. The boiled rice, which was laid near the body of the holy buffalo is now mixed with a part of the buffalo's blood and the undigested food found in its stomach. The whole is put into baskets and the baskets are set on a cart. Two Madigars strip themselves stark-naked and one of them sets on the heads of the other the pot filled with the holy buffalo's blood. The cart and the two naked Madigars, followed by hundreds of people and about fifty sheep and some Midigars to slaughter them, go to a spot outside the village called the bhandera or

¹ The belief that the buffalo represents Dayamava's husband is perhaps a reminiscence of the time when, as among the Orissa Khonds, with much the same rites, men not buffaloes were the victims. Compare Macpherson's Khonds, 67.

boundary. On reaching the spot one of the naked Madigars throws on the ground part of the mixture in the baskets and sprinkles on the ground a few drops from the other's blood-pot as offerings to the evil spirits who live on the boundary. A sheep is slaughtered and the party go round the village boundary till they come back to the same spot. At every turn and corner of the village boundary a little boiled rice from the cart and a few drops from the blood-pot are thrown on the ground as offerings to spirits, While the party are going round the village boundary the two naked Madigars suddenly fall insensible being possessed by evil spirits. One or two sheep are slaughtered and the Mudigars recover. The Holayas take charge of the sheep, give the largest share to the two naked Mádigárs, and divide the rest among themselves. The whole party then return to the goddess' temple and the people go to their homes, bathe, and eat. On Thursday the third day of the fair the patil or headman, the barki or under headman, and the Holaya or village messenger each take clay pots, draw red-white lines on them, fill them with rice Indian millet and wheat, close their mouths with betel leaves and flowers, and lay them before the goddesses. Each of the three is given a woman's robe and bodice as a present from the goddesses. The same evening large numbers come to the big shed. Some wrestle, some dance on long ropes and perform other athletic exercises, some sing songs, and some walk about looking at the fun, or joking and chatting with Suleru, Rasavi, and other courtezans. Many are busy, buying different articles from the shops, or looking at Asadi women dancing. On Friday, which like Tuesday is sacred to the goddesses, the villagers lay cooked food or dry provisions before the goddesses, fill their haps with rice, fruit, betelnuts and leaves, and a copper or silver com, burn incense, and wave lighted lamps round their faces. During the evenings and nights of Saturday Sunday and Monday the rites performed on Thursday evening and nights are repeated, and on Tuesday as on Friday people offer the goddeses cooked food and dry provisions. Nothing special is done on Wednesday. On Thursday the goddesses are taken in procession to a spot outside of the village. A plot of ground about two feet square is cowdunged and decked with devices in coloured powders, and a lamb is set on the square. A member of a subdivision of the Holavas called Potrajás, properly Pote-rajás or buffalo-kings, strips himself naked, ties a few nim leaves round his loins, comes running like a tiger, pounces on the lamb, tears its throat, drinks the blood, and runs off with the carcass towards the village-boundary. Some of the Holayas, Madigars, and others pretend to run after him to catch and kill him. The Potraja soon gets over the boundary and beyond the boundary he is safe. When the buffalo king's lamb-slaying is over the goddesses are taken in procession to the village boundary. The Ranigia comes forward, walks with the provession, and again in front of Dayamava shouts foul words. As soon as the godde-ses are taken out of the shed, the grass but called Matangi's cottage, is burnt to ushes, and, on the spot where the hut stood, the heads of the slaughtered buffaloes are buried. When the goddesses reach the village boundary they are placed on a raised seat, and flowers, turmeric, and redpowder are rubbed on them. A curtain is drawn before the goddesses to show, as is said, that they have entered on a state of widowhood owing to the death of Dayamava's buffalo husband. The carpenter ministrants stand inside of the curtain, break the glass bangles on the goddesses' wrists, strip them naked, take the redpowder off their brows, pull off their heads hands and legs, and put them into two baskots, and with mourning carry the baskets to the goddesses' temple and lay them for three days in the ideal room. The doors of the temple are locked from outside. On the third evening the ministrant opens the temple

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door, goes into the goddesses' room, puts the pieces together, dresses them in new robes, marks their brows with redpowder, puts fresh bangles on their wrists, decks them with flowers and ornaments, and surrounds them with lighted lamps. Many villagers come to the temple, bow before the goddesses, offer them fruit, flowers, betelnuts and leaves, and silver or copper coins, fill their laps with rice, fruit, betelnuts and leaves, and a silver or copper coin, burn incense before them, and wave lighted lamps round their faces. Prayers are offered to the goddesses asking that the village may be free from cholera and small-pox, and that the villagers may have many children and plentiful harvests. All night long Asadi women dance and sing and Asádi men beat big drums and play pipes. The Ránigia and the Potraja join the Asadis and keep up the merriment till daybreak. This merry-making is called honnata or the golden play. The same night a new buffalo is brought and worshipped, turmeric and redpowder are rubbed on his forchead, nim leaves are tied round his neck, and he is set free as the holy buffalo of the goddess Dayamava; If this buffalo dies before the next fair a successor is at once chosen.

The fruit, flowers, betchuts and leaves, money, and clothes presented to the goddesses on the first day are taken by the carpenter ministrants. Under former governments the second day's offerings were taken by government, now they are taken by the village husbandmen. The offerings made on the third, fourth, fifth, and sixth days are taken by the deshpánde the pátel and the kulkarni. The seventh and eighth day's offerings are distributed among the hereditary village servants and craftsmen as the carpenter, the blacksmith, the potter, the Holaya, and the Mádigár. The offerings made on the niinth day are taken by the carpenter ministrants.

APPENDIX B.

Tur. following account of the Dharwar beliefs and practices regarding spirit-possession and spirit-seizures is contributed by Ráo Báhádur Turmal-ráo Vankate-h pensioned Small Cause Court Judge, Dharwar:

Appendix B.

Spirit

Possibation.

In the district of Dhárwár, if a person causelessly keeps on crying laughing or weeping; if he speaks freely and emptily on religious and other subjects of which he knows nothing; if without any apparent illness he cats nothing for days or over-cats without indigestion; if he speaks in a language or repeats verses which he is believed not to know; if children get fits; if grown people strip themselves naked in public; if a man suddenly becomes impotent or a woman is barren or miscarries; if a person grows suddenly dumb, faints or walks in his sleep; they are ledies ed to be possessed by a spirit. The lower classes believe that all forms of disease are spirit attacks. When a disease puzzles a native leech either a Musalman Hakim or a Hindu Vaid, he feels the patient's hand and says Bhutnadi or the fiend pulse, meaning that he can do nothing and that a spirit-scarer must be called in. If the exorcist fails the sick man's friends take him to the English doctor. If he dies they say the English doctor and his English drugs killed him. The men most hable to spirit-attacks are the impotent, the lustful, the lately widowed, brukrupts, sons and brothers of whores, convicts, the idle, brooders on the unknowable, gluttons, and starvers. The women most liable to spirit attacks are girls, young women who have lately come of age, young widows, idlers, whores, brooders on the unknowable, irregular or gluttonous caters, and all sickly women. Women are specially liable to spirit-attacks during their monthly sickness, during prognancy, and in childhed, and men women und children are all apt to suffer when dressed in their best they go to gardens or near wells. Intelligent and educated men and healthy intelligent women are freer than others from spirit-attacks.

From their earliest days Dharwar children learn to believe in spirits. When a child cries its mother says 'There is a dovil there. If you don't keep quiet, he will carry you off.' When they are a little older, their parents say 'Do not go under that tree, or to that house, it is haunted.' All religious Brahmans daily, after worshipping their chief gods and the spirits of their forefathers, before they cat, and after they have caten, offer food and drink to the evil spirits with the rites known as baliharan or offering-making. The most popular Sanscrit books on spirits are the Twelfth Chapter of the Garudpuran and the Tenth to the Thirteenth Chapters of the Vayupuran. According to the Garudpuran five classes of people become ovil spirits. The eater of stale food becomes a parinshita or leavings cater; a fault-finder or tale-bearer becomes a suchinukha or needlefaced; an avoider of hungry Brahmans becomes a sidhraga or angry demon, the proud and selfish becomes a robaka or leaper; and a rich neglector According to the Vayu of Brahmans becomes a lekhaka or writer. pur.in there are twenty-eight classes of spirits, fourteen male and fourteen female. Of the fourteen male spirits, seven are Brahmanakshasas or Brahman ghosts with big fearful faces, red smoke-coloured eyes, small Appendix B.
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necks and thin bellies; and seven are Kubimándás or headless trunks, with eyes on their shoulders and their necks welling blood; and of the fourteen female spirits, seven are Dárhanis and seven are Shárhanis some of whom have heads like welves tigers or kites, and of others the heads are not on their necks but on their knees, thigh, shoulders, waists, breasts, or palms. The food and drink of all is phlegm, food-leavings, human excrement, urine, and mouth-water. Spirits haunt empty and tumbledown houses, cesspools, atheists, the shameless, the proud, the lazy, the miserly, the crazy, the wrathful, despisers of parents and priests, over-sleepers, over-weepers, and women-ruled men.

The every-day Dhárwár spirit beliefs differ greatly from those in the Sanscrit books. Spirits or ghosts are commonly known by the Sanscrit names of Bhut or the departed and Pisach or perhaps desheaters and by the Kanarese name of Devva that is deity. The Dharwar people divide spirits into outside and house spirits. They do not greatly fear outside spirits. Every field, house, and tree has its evil spirits but they also have their guardian spirits or derarus and the guardians are the stronger. Some of the guardians are male spirits, others are females. The males are known as Bharmappa, Kallappa, and many other names; the commonest female guardians are Lakshmi, Kareva, Kállava, and Kannava. They live in shapeless stones daubed with whitewash and red-earth in a corner of a field or in a house or under some hig tree. On every no-moon day, over the male guardians, a few flowers and some sandalwood paste are thrown, and a cocoanut is broken before them; and over the female spirits, stones, turmeric, and redpowder are also dropped. Sometimes the guardians trouble their owners, sending fever, headache, rheumatism, or other slight sickness. The owners fall before their guardians and promise if they take away the sickness they will feed five or ten priests and their wives. When they get well they feed the priests and lay a waistcloth or a robe before the guardian, and themselves wear the robe as if it had never been offered. When they have these sicknesses they say Bharmappa or Lukshimianva kadiane that is Father Brahma or Mother Lukshmi vexes us, and when they have paid their vow they say Bharmappaga madidivi that is Father Brahma is propitiated, Marathas, shepherds, and other flesh eaters offer their guardians a sheep or a fowl and cook and cat the flesh. Many Musalman husbandmen have small shrines of saints in their fields, and worship them when they sicken. In this way three-fourths of the people worship guardians and think little of spirits.

House spirits are the ghosts of house people who have died a violent or an unnatural death, or who have died with a wish unfulfilled. An old man who leaves a young wife is apt to come back, and so is a young woman who has had to leave a fine husband, nice children, and a comfortable home. To keep away uneasy male ghosts special funeral rites are performed; and to keep away a troublesome first wife's spirit the second wife wears a gold wire bracelet round her right wrist and every year in the name of the dead wife feeds a Brahman woman whose husband is alive and gives her a robe and a bodice. This rite is called jakni. To keep away evil spirits on all no-moon days throughout the year, Brahmans, Jains, Lingáyats, Vaishyas, and people of, all castes offer coccanuts, plantains, dates, or other fruit to evil spirit-stones, burn frankincense before them, and feed Brahman, Lingáyat, or Musalmán beggars. Sometimes a robe is offered and flesh eaters sometimes offer a goat or a fowl.

If a person feels uneasy or sick, the people of the house bathe him and make him walk a certain number of times round the house gods, and

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Bráhman and Lingáyat priests or Musalmán beggars are fed. If the patient is no better, some great priest or a Brahman is called in. He prays If a Hindu, he waves camphor lights round the house gods five times and throws holy water on the patient, he engraves mysterious letters and figures on copper plates, and ties them to the patient's arm. If he is a Musahman, he burns frankincense before his panjas or hands locally supposed to represent the open palms of the martyrs Hassan and Hussen, fumigates the patient, writes holy verses from the Kurán on a piece of paper, and ties the paper to the patient's neck. If these means fail, the friends of the sufferer take him to an exorcist, who is called I halbidsoura or spirit-scarer. Strong cunning men who care not to work set up as spirit-scarers, and people believe them. The power of scaring spirits is not hereditary. Some gain it by studying spirit-scaring books, by fasting on no-moon days, and by standing up to their necks in cold water during eclipses and repeating verses in honour of Vetal the ghost lord. The means generally used by professional spirit-scarces to cure patients are to make them hold their heads in smoke made by burning chillies, resin, rnake skin, and peacock feathers.

Two methods of scaring spirits are practised in Dhárwár, a Hindu plan and a Musalmán plan. The Hindu exorcist cowdungs the ground, sprinkler quartz or rángoli powder on the ground in the form of giants, corpses, scorpions, and snakes, places lights on the figures and makes the patient sit near them, throws ashes, cold water, or oil on the patient, breaks coconnuts, repeats verses, and orders the spirit to tell its name. At last the patient, that is the spirit in the patient, tells its name, its home, why it attacked the patient, and on what conditions it will leave. The friends and relations of the patient promise to fulfil the spirit's conditions, and some patients recover. The Musalmán plan differs little from this except that the spirit-scarer repeats verses from the Kurán and Lills a goat or a fowl. Both plans are held equally effective. Hindus generally call Hindu exorcists and Musalmáns Musalman exorcists.

In Bankápur town are two famous Lingiyat spirit-scarers, Fakiráppa Ser angi a cotton merchant and Sivalingáppa the hereditary head or mambalathi of the Bankápur Lingáyats. Outside of Fakiráppa's house is a large pillar or devil post in which Fakiráppa has imprisoned 1000 coil spirit. The house is aften crowded with groups of spirit-possessed prople and their friends. In a pot are several slips of red and blue paper each slip about an inch broad and three inches long. These papers are paper activities. They have been scaked in charmed water and with the figure tritine. They have been scaked in charmed water and with the help of spells have great power over spirits. There are also three large boxes full of country medicines, a mortar and a pestle, and a pair of scales, for both Fakiráppa and Sixlingáppa admitted that they know a little medicine. When people come to be cured and all is ready Fakiráppa and Sixlingáppa ask Is any one suffering from exil spirits?

On one day when the writer was present several people came forward. The first was Gangavia a Lingáyat woman of about twenty. Her husband was with her. He complained that for six months his wife had been vexed by some evil spirit and begged Fakiráppa and Sivlingáppa to east it from her. Fakiráppa and Sivlingáppa spoke to Gangavia. They warned her to tell the whole truth. If she told one lie, a devil out of the devil post would the whole truth. If she told one lie, a devil out of the devil post would punish her severely. In her natural voice Gangavia complained that at time take had been haunted by evil spirits which would not allow her to time take had been haunted by evil spirits which would not allow her to appeak, gate her much trouble, and severe hodily pain. Fakiráppa and Sivlingáppa gummed one of the charmed papers on her brow. Gangavia stopped speaking. They gummed a second piece of charmed paper on her

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nose; she groaned as if some one was choking her. They applied a third piece to her chest; she trembled violently as if in a hysteric fit, Fakir. appa and Sivlingappa said that they had forced the evil spirit to show itself. They asked the spirit whether it was male or female. The woman, or rather the spirit in the woman, said she was the ghost of a kinswoman of Gangavva's and had been haunting her for six months. They asked her if she would leave Gangavva quietly or would prefer to be forced. She said she would leave if a robe was given to Gangavva in her name. The husband agreed to give the robe. Fakirappa told the spirit to swear she would leave Gangavva and to bow to the people. The spirit swore and bowed. Gangavva, who was still in a possessed state, was taken to the devil post and was told to walk thrice round it. At the end the spirit said I have loft Gangavva and am in the post. The charmed papers were taken off Gangavva's brow, nose, and chest. She regained her usual look, and said she felt easy and free from pain. Fakirappa gave her three opening powders and told her to take one every day. Gangavva and her husband went home happy.

The next patient was a Musalmán woman Fatimáh thirty-five years old. She was married and her husband was with her. During the last nine months at night a spirit had at times come to her, pulled off her clothes, and beat and squeezed her. Fakirappa gummed a charmed paper on her brow. She ceased to speak. When a second charmed paper was gummed on her nose she groaned, fell on the ground, and writhed as if she was being When the charmed paper was put on her chest Fatimah, or rather the spirit, said she was a female and for nine months had been troubling Fatimáh at night. Fakiráppa said 'Will you leave Fatimáh or shall I let loose one of my big spirits on you.' She said 'No Sir, No Sir, do not kill me. I fall at your feet. Pardon me, I will leave Fatimah at once if she gets a silver armlet worth £1 12s. (Rs. 16) and wears it on her right arm in my name.' Fatimah's husband agreed to buy the armlet and the spirit promised to leave at once. Fatiman was made to walk round the devil post. The spirit, as in Gangavva's case, cried 'I have left Fatimáh and am in the post.' Fatimáh came to herself, said she felt free, and went off with her husband. In neither case did Fakiráppa or Sivlingáppa take any fee or present. Fakiráppa and Sivlingáppa keep a register showing, with the names and homes of the patients and the dates, about a thousand cases in which they have scared evil spirits without any charge.

Privately and alone the writer asked Fakiráppa and Siylingáppa how they could compel evil spirits to talk and confess and come out. Fakiráppa and Siylingáppa both said 'There are no evil spirits. It is some sickness of the body or of the mind that makes people and their friends think they are haunted by spirits. It is no use telling the people this. The only plan is to humour them, declare you can scare spirits, and order them into the post.' They added that they were generally able to give the people some medicine to help them.

In Dhárwár when an exorcist fails to drive out a spirit, the patient is taken to some holy place or shrine famous for its spirit-scaring powers. Among such shrines are Hanumán's temples at Kurubgatti in the Dhárwár subdivision and at Kadarmandali in the Ránebennur subdivision, (Sattia Bodha, Svámi's shrine in Sávanur, and other minor places in Dhárwár. When these local shrines fail the patient is taken to some distant holy place, the shrine of the saint Váderája Svámi at Swádi in Kánara, of the saint Rághvendra Svámi at Mantrálaya in Belari, to Narsohá's vádi near Miraj, to Pandharpur, to Kolhápur, to Tirupati in North Arkot, and to Rameshvar in the south of India. At these holy places

the patient is made to bathe daily, to walk a certain number of times round the temple or round a *pimpal* tree, or to bow before the idel or tree a hundred or more times, or to roll round the temple tree five or seven times a day. Some patients perform these exercises in wet clothes. Bráhman or Lingáyat priests or Musalmán beggars and other poor people are also fed.

Within the last fifty years especially in Dhárwár, Hubli, Gadag, and other large towns, spirit attacks have grown much less common and much less revere. An increase of intelligence due to letter writing and travel has perhaps helped the people to shake off some of the load of their hereditary dread of ghosts. But more and more regular food, cleaner water, warmer clothes, airier houses, and cleaner surroundings have probably done more to help the people to throw off spirit-attacks.

Appendix B.

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APPENDIX C.

WRESTLING HOUSES!

Whisting

An interesting feature of Dharwar life is its Wreetling-Houses or Gardimanis. The word comes from gardi (K.) athletic exercise, and mani (K.) house. It corresponds to the Sanskrit malla-griba and the Persian tellimbhana.

The sport-house is an old Hindu institution. In one of these, dressed in woman's clothes, Bhim, the giant Pándhav, wrestled to the death with Kichaka who had insulted the sister-wife Draupadi. The Puráns also have many references to these wrestling pits and their exercises.

In Dharwar in the east, and to a less extent in the west, every town and large village has its sport-house, and large towns often have several. In the eastern plain from the outside the sport-house looks like a flat roofed building about seven feet high. In the wet west, where they are rare, a tiled roof is built over the flat roof. In all cases the outer walls are whitewashed and the corners picked out with red. In many colours and sizes are figures of huntsmen, on feet and on horse, with spears and guns, shooting tigers and other wild animals, and wrestlers in fierce struggle. There are no windows and only one doorway with a strong wooden door. The top of the doorway runs two or three feet above the line of the roof and is coloured red, green, yellow, and blue. Along the sport-house wall is a raised earthen bench about two feet high and two feet broad where visitors sit and sing and smoke.

In front of the sport-house is a space for open-air wrestling. A strong door, the only opening in the walls, about 22' x 3', opens on three narrow steps which lead about four feet down to the floor. The house, whose walls are daubed with red earth, is about ten feet broad, eighteen long, and ten high. It is divided into three rooms each about six feet broad and ten feet long. Except one dim lamp all is dark as during exercise the door is always carefully closed. On one side of the house, on a seat two feet broad and three feet high, are clubs weighted with lead, stone weights, and iron-chains fastened to a stout bar. In a niche in one of the walls are the guardians of the house a small figure of the monkey god Hanuman, and of the Panja or Ali's Hand. Before the guardians is a censer in which frankincense is burnt. Thursday is the Musalman and Saturday the Hindu guardian's great day. On Thursday all athletes burn frankincense before the Hand or Panja, throw a flower garland over it, and offer red sugar. On Saturday all Hindu athletes bathe, go to the god Hanuman, throw themselves before the image, offer sandalwood paste and flowers, wave burning frankincense, and lay fruits or other entables before the guardian. Some red earth called kávi (K.) is kept in a corner of the room and rubbed on the wrestlers' bodies when they perform.

¹ Rav Bahádur Tirmalrav Venkatesh.

Youths who attend sport-houses are known as gardinani hulagas or sport-house boys. Except the depressed classes who have sport-houses of their own, boys of all castes Brahmans, Vanis, Jains, Lingayats, Maráthás, and Musalmáns attend the village sport-house. Boys begin to attend sport-houses about ten and go on till they are thirty or more. Athletes and loys when in training are well fed. Those whose caste rules allow it Those who cannot cat flesh take specially large quantities of sugar and clarified butter. Boys and men of all classes when in training are careful to drink a pint of milk every day, and soak overnight gram in water and cat it in the morning, and, if they can afford it, ent dates soaked overnight in clarified butter. Boys who are fond of athletic exercises do not marry till they are twenty-five and even then, if they are champions, they do not live with their wives. A champion who has hum heaten once or twice generally gives up wrestling and begins to live For a month before the yearly challenge meeting the with his wife. The winner generally gets a handsome chammion lives on rich food. prize, a bracelet, a turban, or a waistcloth. The usual yearly challenge morting is held in October on the day before Dasara. On the day of the meeting one or two sheep are slain in front of the guardian Hand, and the heads and legs are buried under a stone slab in front of the Hand, and the reet is eaten by Musalmans Maráthas and other flesh-eaters. Bráhmans Langayata and Jains who may not touch flesh, feast on fruit and sweet-Anything that is over is buried in a corner of the sport-house. When at exercise the athlete wears a tight pair of short drawers and a wanthand tightly wrapped round the waist and one end passed between the legs and tightly tucked behind. When resting or before beginning a conte t they cometimes cover themselves with a cloak. All articles worn by athlete, are washed in red-earth water. The hours are four to six in the morning and eight to ten at night. As soon as a boy enters a grunns ium he takes off his head-dress, jacket, and other clothes except the tight drawers and the waistband. Eight to ten stand in one line and eacht to ten in another line opposite to them. Each catches his right arm with he hollow left hand and smites it near the shoulder several times mul ing a loud noise. This is called shaddle hodiyone or shoulder-smiting. They then touch the ground with their toes and palms and move their bodies back words and forwards without bending the knees, if possible stretching of far that the nose can touch the ground. This is called by Hindus the decuration or god's exercise and by Musalmans Maula Ali's sam or the prophet Alin exercise. While performing exercises at each motion of his budy, the leader keeps shouting short unmeaning sentences in which the names of Bhim and the prophet Ali occur and the rest repeat the shout and copy the movement. The last words of every couplet or triplet are in thome. They also stand and walk on their hands and sit down and the more than a hundred times. They jump and turn double somersaults. They perform with clubs, lift weights, and climb greasy poles, and penerally end by wrestling in couples.

At the challenge meetings the champions rub their bodies with red earth, tie an amulet or evil-scarer to one of their arms, and hide themselves under a dirty robe or a blanket in case any soreerer or evil-eye

Girls of the prostitute class and professional athletes, learn athletic thould esp their powers. exercises in their homes, but do not go to public sport houses. When they tight drawers from the waist to the knee, and small bodices. When a girl are grown they perform in public but nover wrestle. perform in public she wears a bodice and robe like an ordinary woman

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with one or two differences. She passes the skirt of the robe so tightly back between her feet that the leg is bare up to the knee, and, instead of drawing the other end of the robe over the chest and head, she binds it tightly round the waist. Besides the tight bodice over the breasts the passes a bright kerchief over the right and under the left rhoulder and ties it tightly behind the neels, fastening the two lower ends of the tippet to the robe at the waist one at each side. As soon as the performance is over she unties the kerchief and draws the upper end of her robe over her shoulder and head. Girls perform the same exercises as men except that they never wrestle.

APPENDIX D.

QUARTZ-POWDER.1

RANGOLI, the word used for the quartz lines and pictures which prudent housewives sprinkle in front of their house doors, is said to mean the brilliant line from the Sanskrit rang colour and avali a row. The orthodox explanation of the sprinkling of these lines and figures, as well as of whitewashing cowdunging and tying strings of mango leaves in houses, is that it is for beauty, because God dwells in the house.

QUARTY-POWDER.

Appendix D.

The best rangoli is made by pounding white quartz into powder. Its colour is white and it may be used either while Brahmans are in a pure state after bathing, or when they have not bathed. In the absence of quartz powder, rice-flour may be used. In addition to the white lines, dots or figures of yellow, red. black, green, and blue powder are also occasionally used. The yellow powder is made from turmeric, the red is the ordinary quiál of rice or rági flour dyed with red sanders, the green is from the ground dried leaves of the Æschynomene grandiflora, the black is ground charcoal, and the blue is indigo. Every day lines, dots, and figures are drawn on the floors of all Brahman houses, three, four, or five straight lines parallel to the walls of rooms and verandas. Cross lines, circles with a dot in the centre, and elaborate figures are also drawn. On great occasions elaborate tracery and figures of men, animals, and trees are drawn. On Nágar-chaut or the Cobra's Fourth, that is the bright fourth of Shrávan or August-September, Brahmans, in addition to making the usual figures, draw and worship single, double, and twisted forms of snakes sprinkled in quartz powder. During the leading days of the Divali feast, the dark 14th and 15th of Askvin or October-November, and during the bright half of Kartik or November-December, all Hindus set what they call the Pandus, five cowdung cones two or three inches high and about the same round the foot, outside to the right and left of the threshold, and on the top of the outer house door. Round each cowdung cone they draw double or treble white and red lines, set a flower of the kumbal (K.) Cucurbita hispida gourd on each of the cowdung cones, and throw over all turmeric and redpowder. On the marriage day of Vishnu and the tulsi plant, that is the evening of the bright twelfth of Kartik or November-December, and when Lakshmi the goddess of wealth comes in Shravan or August-September, besides the usual quartz figures, gopad or cow's footprints are sprinkled with rangoli powder all along the ground from the outer threshold of the house to the shrine which has been made ready for the god. When feasts are given in the open air, in front of and on each side of the board on which each guest sits, lines and arches are drawn in quartz and redpowder. On birth, marriage, and other festive occasions, and when entertainments are given elaborate quartz powder figures are traced. On occasions of deaths, funeral ceremonies, yearly mind-rites or mind-dinners, no quartz lines, dots, or figures are drawn, except that at dinners in honour of saints a little quartz powder is occasionally used. No special

DISTRICTS.

Appendix D.

Ouartz-Powder.

quartz figures are drawn on no-moon or full-moon days. The cowdunging of the ground and the drawing of fearful quartz powder figures is an important part in most exorcisms.

The great tracers of quartz powder figures, forming them simply by letting the powder drop from between the thumb and fingers, are Brahman women. No Brahman woman during her monthly sickness, for three months after childbirth, or when in mourning may draw quartz lines. Jains use Rangoli like Brahmans, and Marathas use it on special occasions. Some, but not all Lingayats, draw a few lines every day in their houses. On moon-light nights and on great occasions, Lingavats draw long double lines of dots, alternately of lime and water and red earth, and dine or play close by these lines. Lingayats also draw one or two lines of quartz powder along the edge of the grave before burying the body. Parsis, like Hindus, decorate their house fronts by stamping them with quartz powder plates. Musalmans and Native converts to Christianity are the only persons who do not use quartz decorations. Formerly the traceries were all made by letting the powder slip between the thumb and the fingers. Of late years tubes and plates with upturned edges piened with designs have been filled with powder and either rolled or stamped over the place to be decorated.

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